DIGITAL COMMUNICATOR CONTROL PANEL

Omnia 8
Omnia 4
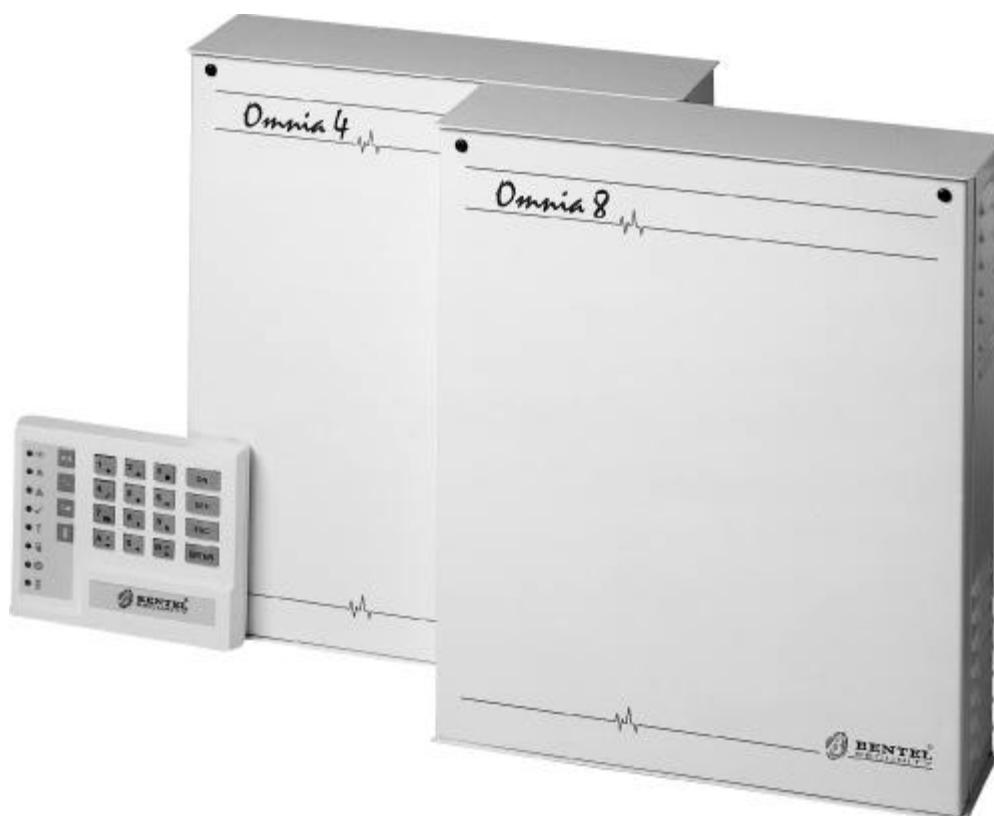
INSTALLATION MANUAL

C E

BENTEL
SECURITY

BENTEL SECURITY

DECLARATION of CONFORMITY

BENTEL SECURITY S.R.L. - Via Florida - 63013 GROTTAMMARE AP

Declares that the

Omnia8 *and* **Omnia4**

Digital Communicator Control Panel

are tested and approved to:

Emission:

➤ *EN 50081-1/1992*

Immunity:

➤ *EN 50082-1/1998*

Low voltage:

➤ *EN 60950:1996 + A4:1997*

and thereby, comply to the ESSENTIAL REQUISITES of STANDARDS 73/23/CEE, 89/336/CEE, 92/31/CEE and 93/68/CEE

Omnia8 and NormaVox2 are **tested and approved** *by the Italian "Ministero delle Comunicazioni" with certificate of approval:*

N. 00/003/DGCA

thereby, are suitable for connection to the PSTN line.

Approved by Ministero P.T. CE Ø166 X

Grottammare, **March 1999**

CONTENTS   5

General features

Burglar control panel
- ❐ 8 input zones for Omnia8, and 4 input zones for Omnia4 programmable as: NO, NC, Balanced, Double Balanced, Instant, Delayed, Path, 24h, Duress, Fire, Double Pulse, Unbypassable, Chime, Test, Silent.
- ❐ 24h balanced Tamper zone
- ❐ Alarm output: relay
- ❐ 2 programmable open-collector outputs
- ❐ Fire sensor power supply with RESET
- ❐ Up to 8 keypads
- ❐ Up to 16 key readers
- ❐ 4 independent partitions
- ❐ Auto arming for each partition: daily or weekly programming
- ❐ 23 user codes (4 to 6 digits) with different functions
- ❐ Disarm for Patrol with auto re-arming
- ❐ Programming from keypad
- ❐ Programming via PC through RS232 interface, or OmniaMod modem via telephone line
- ❐ Built-in 1 A linear power-supply

Dialler
- ❐ DTMF or Pulse dialling
- ❐ 8 telephone numbers for central station, teleservice calls
- ❐ Operates with CONTACT ID - DTMF protocol, and the following pulse protocols:
  ADEMCO / SILENT KNIGHT - slow 10 baud - 3/1, 4/1, 4/2, 3/1 extended
  ADEMCO / SILENT KNIGHT - fast 14 baud - 3/1, 4/1, 4/2, 3/1 extended
  FRANKLIN / SESCOA / DCI / VERTEX - Fast 20 baud - 3/1, 4/1, 4/2, 3/1 extended
  RADIONICS - 40 baud - 3/1, 4/1, 42, 3/1 extended
  SCANTRONIC - 10 Baud - 3/1, 4/1, 4/2, 3/1 extended
- ❐ Optional NormaVOX2 voice board
- ❐ 128 event memory (viewed on PC display)
- ❐ 3 Superkeys for immediate alarm calls from keypad
- ❐ Programmable Test call
- ❐ Teleservice management
- ❐ Callback
- ❐ Line-sharing management (double call)

Overview

The Omnia8 (8 zones) and Omnia4 (4 zones) burglar control panels are completely programmable. The operating principles of these control panels are identical, therefore, the instructions in this manual are valid for both systems.

Omnia8 and Omnia4
This system has a Main Unit with a built-in communicator and one keypad. It and can control up to 16 remote devices (key readers and keypads). A maximum of 8 keypads can be connected ----including the one supplied. The NormaVox2 voice board enhances the system even further by providing Voice call management.

Keypads and key readers can be connected to the control panel by a four-wire parallel bus.

Communicator
The Communicator can manage 8 telephone numbers for central station communication and teleservice. A Customer code, and a communication protocol can be assigned to each central station telephone number.

The Event codes (e.g. Arm, Disarm, Alarm, Fault Warning) will be sent to the programmed central station telephone numbers. It is possible to assign a 2 digit code to each event.

Voice messages
The optional "NormaVOX2 Voice Recorder" can record and send up to 8 voice messages to 1 or more of the 8 programmed Voice call telephone numbers.

Teleservice and remote monitoring
Teleservice and remote monitoring of the control panel can be done from a Personal Computer with the OmniaMod modem and management software.

Programming
The control panel can be programmed from:

➢ any keypad;

➢ on-site Personal Computer connected to the RS232 interface on the main board;

➢ remote Personal Computer connected to the Main Unit through the OmniaMOD modem via telephone line.

Basic system
Omnia8 and Omnia4 both have a Main Unit, a built in Communicator and 1 keypad.

Up to 16 remote devices can be connected to the system, with a maximum of 8 keypads, including the one supplied. Installation of the NormaVox2 voice recorder board enhances the system even further by providing Voice call management.

OmniaMOD
The OmniaMOD modem, and the necessary software will allow the installer to provide teleservice for the Omnia8 and Omnia4.

Teleservice
The **OmniaMOD/V1** modem will allow the installer to program, manage and provide teleservice (remote maintenance authorized by the user).

Remote monitoring
The **OmniaMOD/V2** modem will allow the Installer to provide teleservice and telemonitoring (constant supervision) for all the connected systems. All operations, alarms and trouble warnings will be logged in the event buffer. All the Events signalled to the central station will provide detailed information, maps and icons.

Management software
The Management software manages teleservice and telemonitoring, and also provides data viewing and detailed printout of all the logged teleservice and telemonitoring operations.

For further details of management software refer to the Software Manual.

Accessories
Below is a list of the Omnia8 and Omnia4 Accessories.

NCDUE/TAST	Keypad
BPI/3	Flush-mount key reader
BPI/3-W	Wall-mount key reader
ECLIPSE	Flush-mount contact free key reader
SAT	Contact free Digital Key
DKC	Digital key
NORMA-VOX2	Voice board
OMNIA-MOD V1	Modem for Teleservice management only
OMNIA-MOD V2	Modem for Teleservice and Telemonitoring complete with telemonitoring software
CVSER/9F9F	Serial cable for PC connection
ADSER/9M25F	Serial adapter for DB25
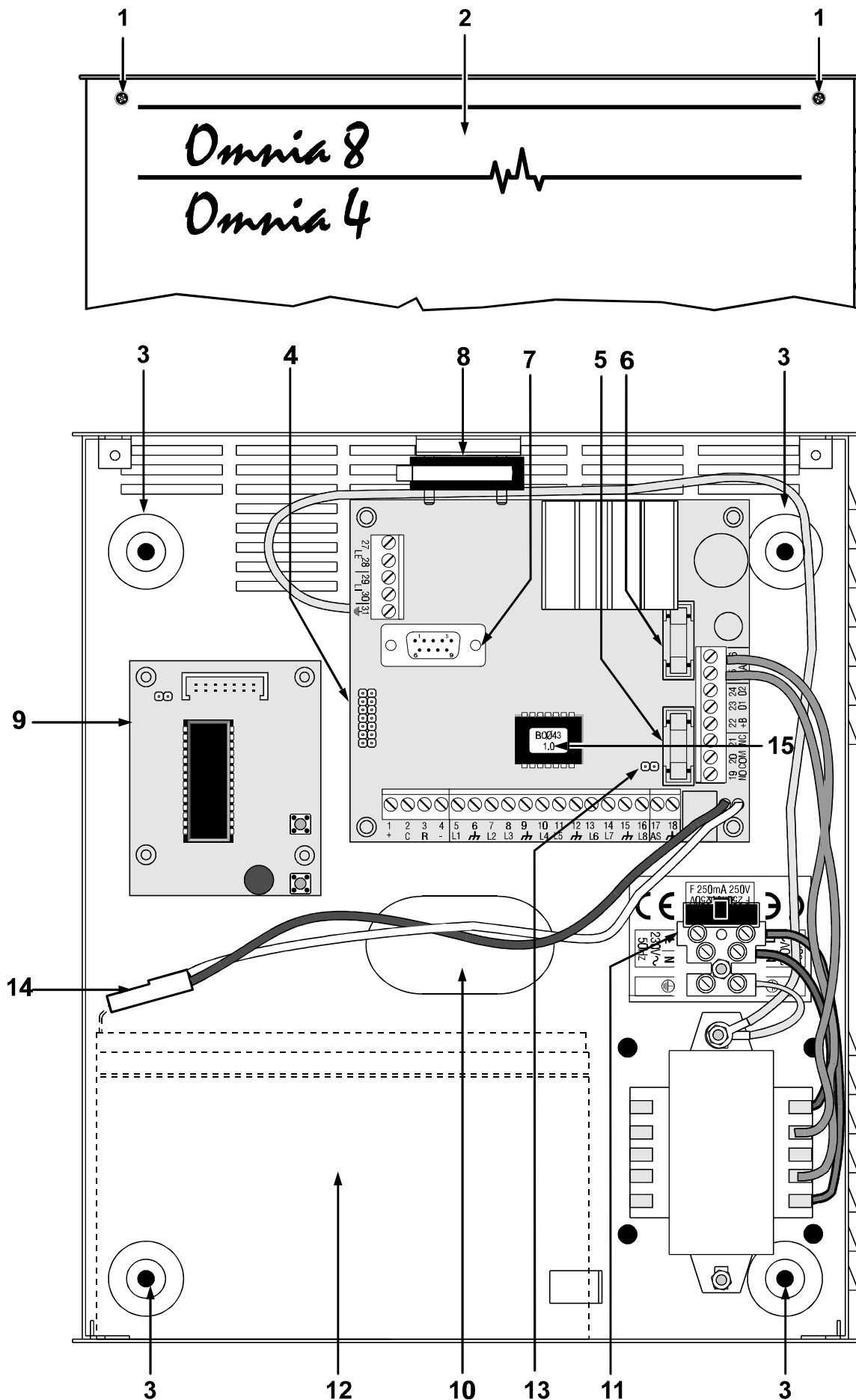
Figure 1 *Parts of Omnia8 and Omnia4*

The numbers in boldface in this manual normally refer to the parts illustrated in this chapter. The **PARTS** and **DESCRIPTION** columns in the following tables show the reference number and a brief description of each part.

The **LEDs** column shows the LED indicators. The **STATUS** column shows the meaning of their ON/OFF status.

■ **Main Unit**

PARTS	DESCRIPTIONS
1	*2 screws for frontplate*
2	*Frontplate*
3	*4 holes (Ø 5 mm)*
4	*Connector for the NormVox2 voice board*
5	*Protection fuse for sensor and auxiliary power supply (250 V - 5 A)*
6	*Protection fuse against battery polarity inversion (250 V - 8 A)*
7	*DB9 connector for PC connection via serial cable*
8	*Tamper microswitch (optional)*
9	*NormaVOX2 voice board (optional)*
10	*Cable hole*
11	*Mains connection terminals (230 V~ ±10% / 150 mA)*
12	*Compartment for 13.8 V / 7 Ah standby battery (optional)*
13	*Service mode jumper: when **connected** the Alarm outputs will be disabled and the control panel will be ready for service*
14	*Battery connectors*
15	*Firmware Release: to be communicated to Service dealer*

◼ Keypad

PARTS	DESCRIPTIONS
16	*LED indicators*
17	*Frontplate fastener (also M2.2 x 6.5 screw can be used ----not supplied)*
18	*Board supports*
19	*Board tab*
20	*Board supports*
21	*Tamper microswitch*
22	*Address dipswitches*
23	*Terminals*
24	*Board supports*
25	*Pull-off contact screw*
26	*Cable passage*
27	*2 holes (Ø 4 mm) for backplate mounting*
28	*Buzzer*
29	*Tamper microswitch*
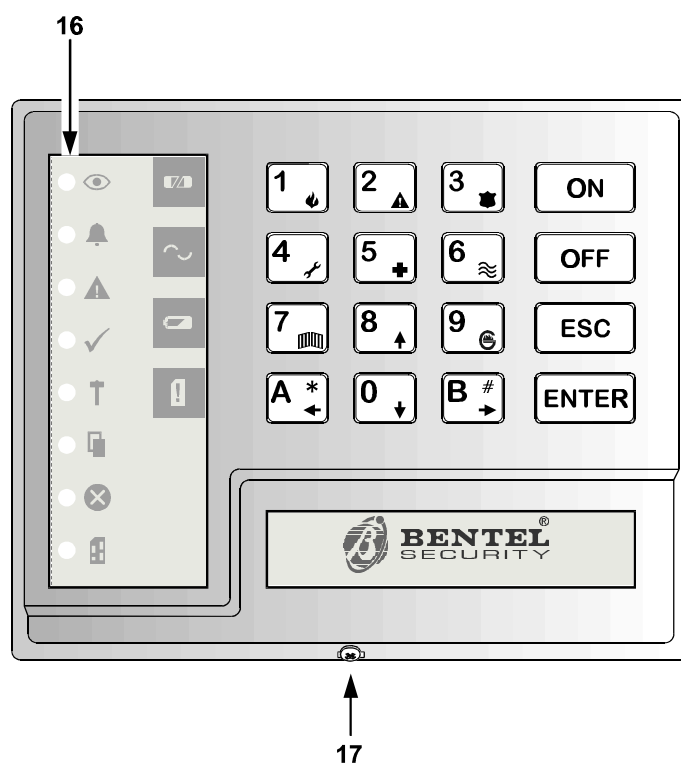
Figure 2 *Keypad*
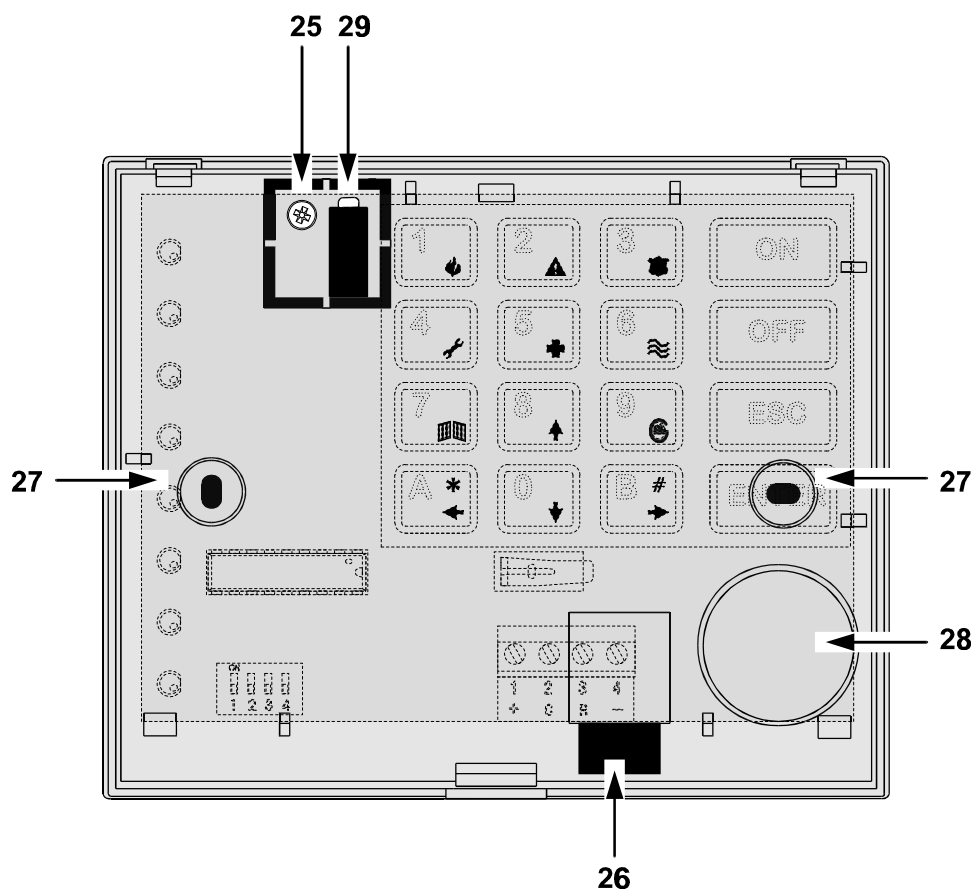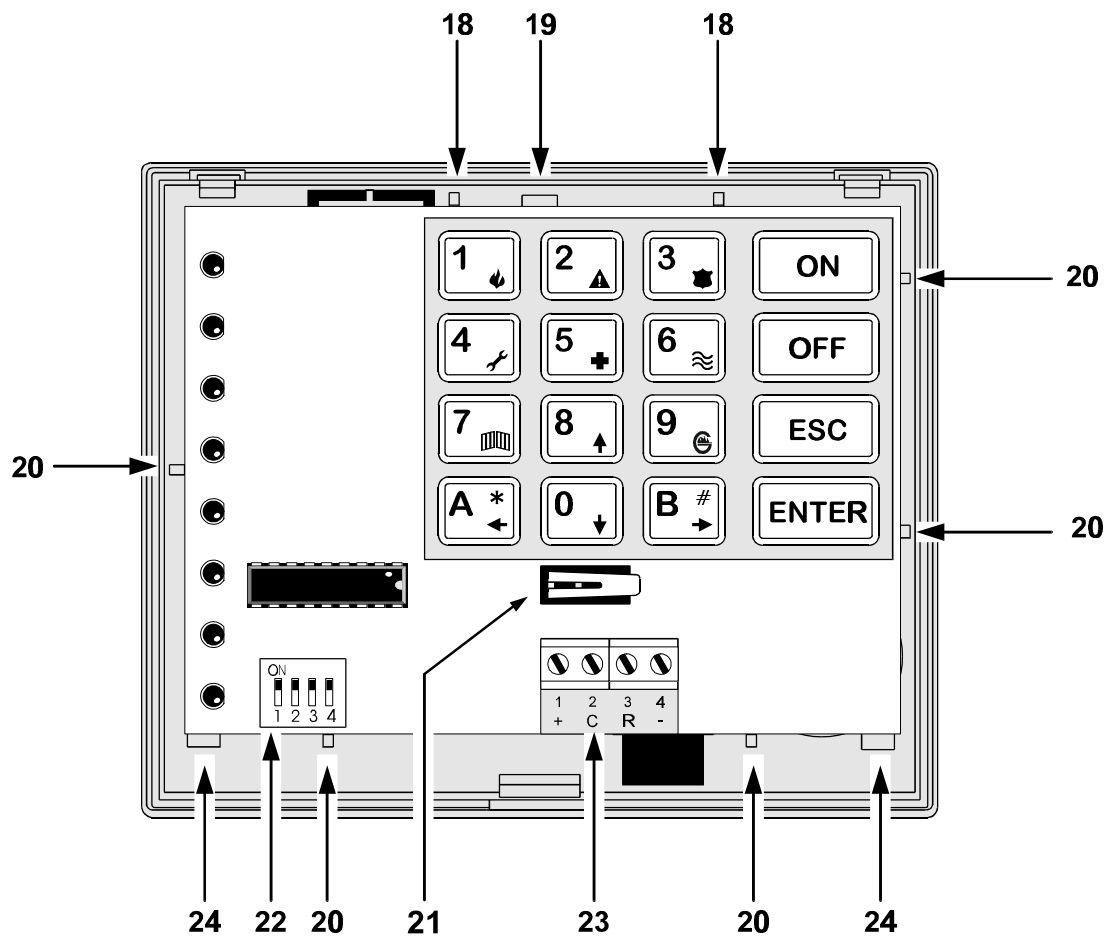
Figure 3 *Keypad Parts (internal parts)*

PARTS

LEDs		STATUS	
👁	**Arm**	off: **ON:**	All the enabled **partitions** on the keypad are **disarmed** At least one **Partition** enabled on the keypad is **armed**
🔔	**Alarm**	off: *slow flashing:* *fast flashing:*	Standby status (no alarm) Alarm memory Alarm status
⚠	**Trouble**	off: **ON:** *slow flashing:*	No trouble Trouble: use the **Trouble Viewing Mode** to identify the trouble type **Trouble Viewing Mode** running
✓	**Ready**	**ON:** off:	Ready to arm: ----arming will not generate an alarm At least one unbypassed zone is in alarm status: ----arming will generate an alarm
✝	**24h**	off: *slow flashing:* *fast flashing:*	Tamper line balanced Alarm memorized on the tamper line Alarm memorized and tamper line open
▯		**NOT IN USE**	
✕	**Bypass**	off: **ON:** *slow flashing*	No bypassed zones At least one of the keypad zones is bypassed Control panel is ready for zone bypass
▦	**Program.**	off: **ON:** *slow flashing:* *fast flashing:*	Control panel in standby status Control panel enabled for Teleservice calls Control panel in programming status Control panel in service status (maintenance)
		TROUBLE VIEWING MODE	
▰	**Key 1**	off: **ON:**	fuse **5** intact fuse **5** blown
∿	**Key 4**	off: **ON:**	Main Unit powered by mains mains failure: Main Unit powered by battery
🔋	**Key 7**	off: **ON:**	battery charged low battery or battery trouble
❗	**Key A**	off: **ON:**	communication bus normal communication bus trouble
	Key 0	off: **ON:**	telephone line present telephone line trouble

■ Digital key and key reader

The key reader is an optional accessory, available in the following versions.

BPI3GEW	*GEWISS*
BPI3GP	*GEWISS playbus*
BPI3-GN	*GEWISS noir*

BPI3	*TICINO magic*
BPI3LIV	*TICINO living*
BPI3INT	*TICINO international*
BPI3LGT	*TICINO light*

BPI3DEL	*DELTA*
BPI3-DN	*DELTA noir*

BPI3VI	*VIMAR idea*
BPI3VIB	*VIMAR bianco*

BPI3-AVE	*AVE*
BPI3-AN	*AVE noir*

Figure 4 shows Eclipse/Sat system which is recommended for all types of installations. The Eclipse key reader and Sat electronic key exchange information without the need of electrical contacts. The Eclipse/Sat system is highly resistant to oxidizing agents, and wear. The Sat electronic key is waterproof, needs no battery, and has an almost unlimited life span.

The Eclipse/Sat system is controlled by inserting the Sat key into the Eclipse key reader, and by pushing the Sat electronic key against the control button inside the key reader. The BPI3/DKC system is controlled by inserting the DKC electronic key into the BPI3 key reader, and by using the control button on the DKC electronic key. This manual deals with an installation operating with BPI3/DKC system, however, apart from the small difference in the position of the control button, the flush mounting BPI3/DKC, and the Eclipse/Sat function in the exact same way. The BPI3/W wall mounting system can be used where flush mounting is not possible. Alongside the terminals for the bus connection, this system offers two extra [AS] terminals for protection against tamper an pull-off.

PART	DESCRIPTION
30	*Terminal board*
31	*Address dipswitches*
32	*Key slot*
33	*Control button*

LED		STATUS	
34	**RED**	*ON:*	partitions assigned to the key reader armed
35	**AMBER**	*ON:*	Type A arming
36	**GREEN**	*ON:*	Type B arming
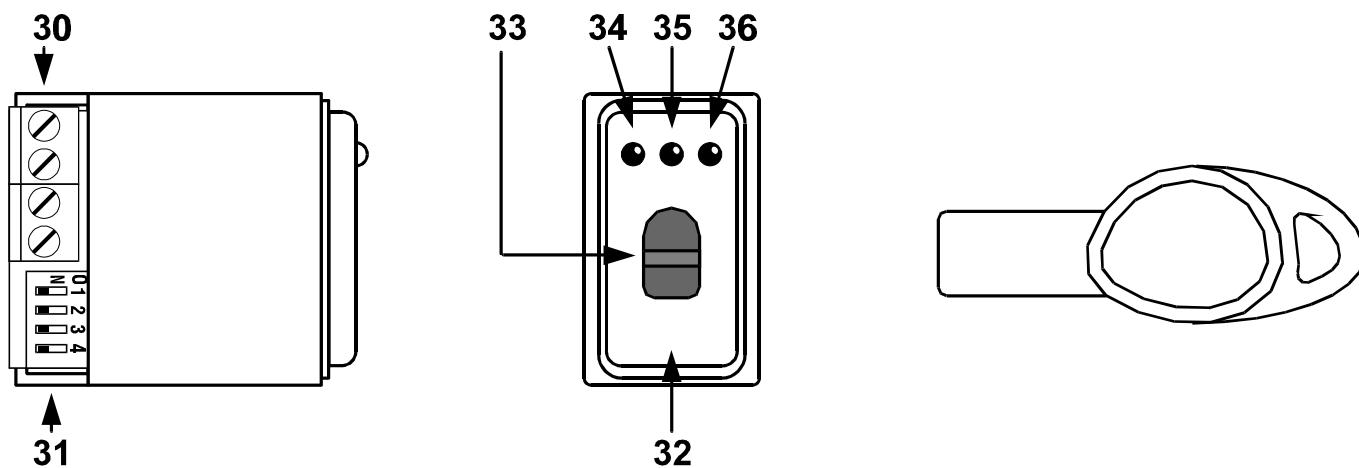
Figure 4   *Eclipse/Sat key reader/digital key*
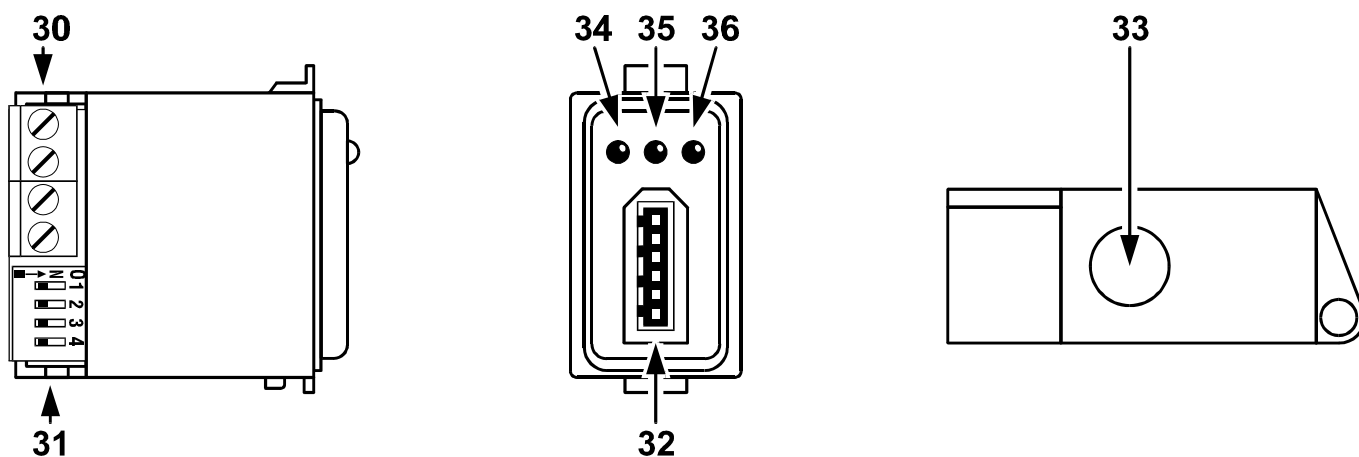
Figure 5   *Magic version key reader and digital key*
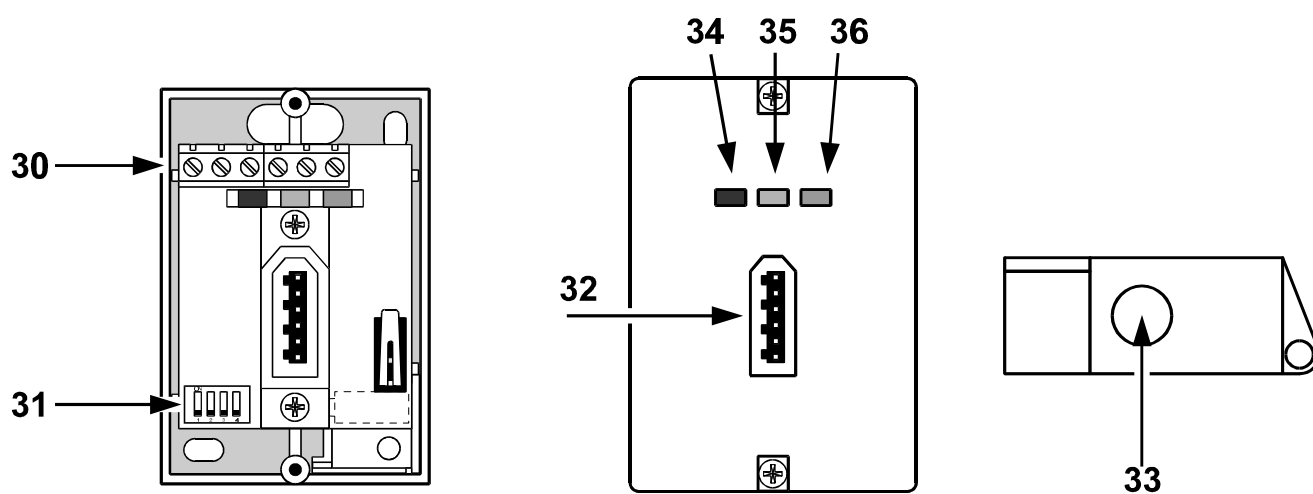
Figure 6   *Wall mounting BPI/W key reader and digital key*

System mounting

Main Unit The Main unit can be installed anywhere on the protected premises. However, it should be within easy reach of all the connection cables, and should not be on view.

Follow the steps in the installation instructions carefully, and refer to the illustration on page 10 and the diagram below.

1. Unfasten the screws **1** and remove the cover.

   Contents: Main Unit PCB; keypad; terminal board for the connections to the Mains; balance resistors; small plastic bag containing the screws (for wall mounting) and reverse locking circuit board supports.

2. Fit the reverse locking circuit board supports to the backplate, and then lock the PCB, and the NormaVOX2 board into place (refer to the figure below).

3. Fit the transformer (not supplied) onto the screws on the backplate, use M3x10 screw nuts (not supplied) to fix it in place. If the transformer does not fit onto the screws, use the 4 holes ($\varnothing$ 5.10 mm). The transformer must comply with the required specifications (refer to fig. 8), and must be fitted firmly in place, for maximum stability of the configuration.

4. Check for cable conduits and water pipes before drilling holes. Use the holes **3** on the backplate as a drill pattern.

5. Pass the cables through the cable holes **10** and mount the unit (holes **3**).
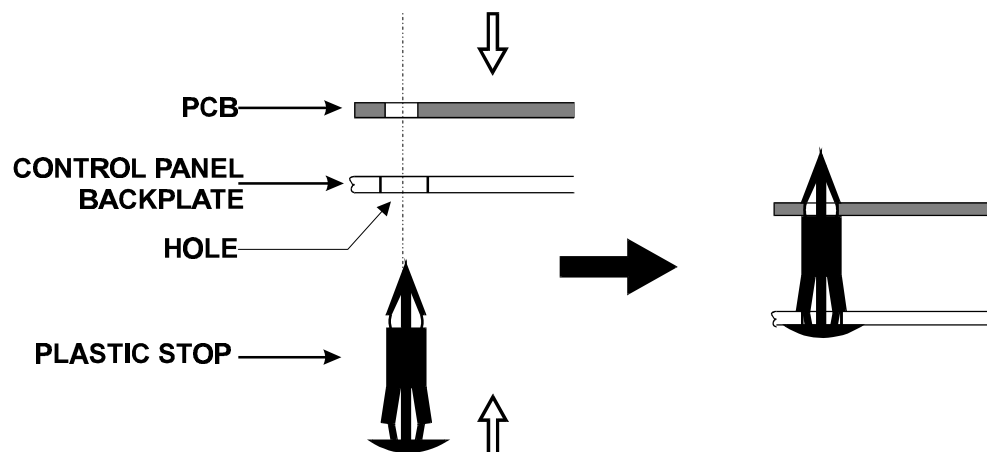
Figure 7 *Reverse locking circuit board supports*

Keypads   Keypads should be installed in places where access to the following options is required: Programming, Disarm by Duress code, Zone Bypass, Reset Alarm Memory and Enable Teleservice. **Key readers do not provide the aforesaid options.**

Keypad mounting (refer also to the illustration on page 13)

1. Unfasten the screws **17** and remove the frontplate.

2. Push the tab **19** upwards to release the PCB.

3. Pass the cables though the cable hole **26**.

4. Check for cable conduits and water pipes before drilling any holes. Use the holes **27** ($\varnothing$ 4 mm) on the backplate as a drill pattern**.**

5. Fit the backplate to the wall.

6. Replace the PCB.

7. Make the connections on the terminal board **23** and assign device addresses by means of the dipswitches **22**.

8. Replace the frontplate and fasten the screws **17**.

Key readers   Install key readers as per light switches and plug sockets. Install in places where access to **system arming/disarming only** is required.

+   Make the connections on the terminal board **30** and assign addresses by means of the dipswitches **31** before mounting the key readers.

Primary voltage= 230 Vac, 50 Hz
Secondary voltage= 17 Vac
Secondary current= 1,5 A

R=2,55 mm

71,75 mm

47 mm

56 mm
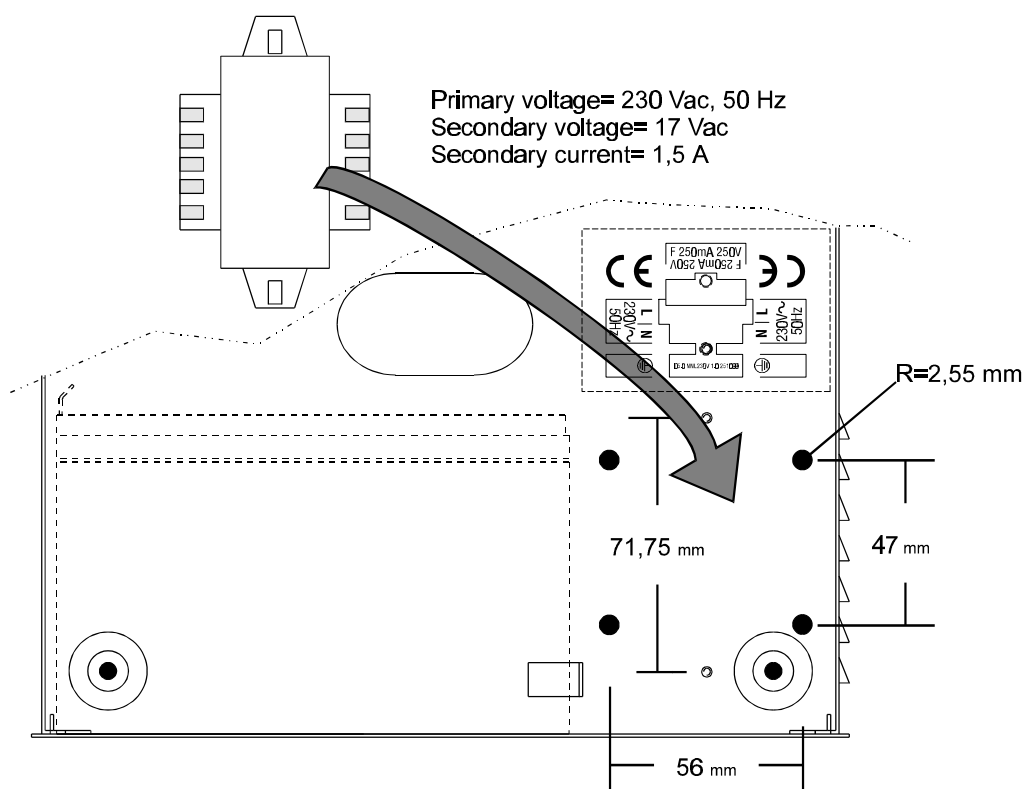
Figure 8   *Transformer installation*

Security System Control Panels **Omnia8/Omnia4**

Terminal board

Below is a detailed description of the Main Unit terminal board, keypads and key readers.

➢ The **Terminal** column shows the terminal number and the identifier abbreviation of each terminal (in square brackets).

➢ The **DESCRIPTION** column holds the description of the terminals.

➢ The **V** column shows the voltage on the corresponding terminal. The **I** column shows the maximum current for each terminal. Refer to the note below the following table, for the meaning of the number in round brackets **(1)**.

Main Unit

Terminal	DESCRIPTION	V	I
5-7-8-10-11-13-14-16 **[L1¼ L8]**	Alarm Zones programmable as NC, NO, Balanced or Double Balanced	-	-
4 **[–]** 6-9-12-15-18 **[╬]**	Ground and Negative	0	-
1 **[+]**	Power supply to control devices (keypads and key readers)	13.8	(1)
2 **[C]**	Connection terminal for standard BPI control devices (keypads and key readers)	-	-
3 **[R]**	Connection terminal for standard BPI control devices (keypads and key readers)	-	-
17 **[AS]**	Balanced Tamper line	-	-
19-20-21 **[NO-COM-NC]**	Voltage free alarm-relay contacts in standby status ➔ NC connected to COM and NO open in Alarm status ➔ NO connected to COM and NC open	-	1
22 **[+B]**	Auxiliary power supply	13.8	**(1)**
23-24 **[O1] [O2]**	Open-collector auxiliary output programmable for the signalling of: Armed Partitions, Disarmed Partitions, Trouble, Alarm Mem., Exit Time, Entry Time, Chime, Arming Delay, Alarm/Tamper, Fire GND, Telephone Line Trouble the output status can be either terminal to ground or terminal open. The standby status is programmable	0	0.1
27-28 **[LE]**	Terminals for the External Telephone Line connection	-	-
29-30 **[LI]**	Terminals for the connection of other telephone devices on the same Control Panel line (switchboard, telephone, fax, modem, etc.)	-	-
31 **[⏚]**	Earth	-	-

(1) The total current absorbed by terminals [+B] and [+] must not exceed 1 A.

Terminal	DESCRIPTION	V	I
1 **[+]**	Power supply: positive	13.8	-
2 **[C]**	*"Command"* terminal to be connected to the corresponding terminal on the Main Unit		
3 **[R]**	"*Answer*" terminal to be connected to the corresponding terminal on the Main Unit	-	-
4 **[-]**	Power supply: negative	0	-

Flush mounting key readers have bus connection terminals only. Wall-mounting key readers (BPI/W) have also the following:

Terminal	DESCRIPTION	V	I
[AS]	Tamper microswitch	-	-

Connections

The security devices are divided into types (control devices, signalling devices, etc.). Each connection type is shown separately.

+ Use shielded cable for the connections, with one end connected to Main Unit ground and the other left free.

Only the basic connections are described, as the extreme flexibility of Omnia8 and Omnia4 does not allow all the possible applications to be shown.

Diagrams The diagrams provide a simplified guide, and should be referred to when making the connections.

+ The Main Unit terminals are shown for each connection. The terminals in the diagram may be located differently on the actual terminal board.

Connection of the control devices

The **control devices** control both the basic and advanced options.

The keypads control all the Omnia8 and Omnia4 options. The key readers control the basic options only: Arm/Disarm.

■ Control devices: keypads and key readers

Keypads and key readers have the same electrical connections. Both can be connected to the 4 wire parallel bus connected to Main Unit terminals 1[+], 2[C], 3[R] and 4[--].

Up to 16 remote devices (key readers/keypads) can be connected to the bus, with a maximum of 8 keypads including the one supplied.

+ At least one Keypad must be connected to the system.

Electrical connections Keypads and key readers must be connected in parallel to the communication bus: terminals 1[+] and 4[--] supply power; terminals 2[C] and 3[R] constitute the data exchange bus.

Figure 9 illustrates the connection of 3 control devices (keypads or key readers).

Device Address Keypad addresses are assigned by means of dipswitches 2, 3 and 4 on the dipswitch board (**22**). Key reader addresses are assigned by means of dipswitches 1, 2, 3 and 4 (**31**).
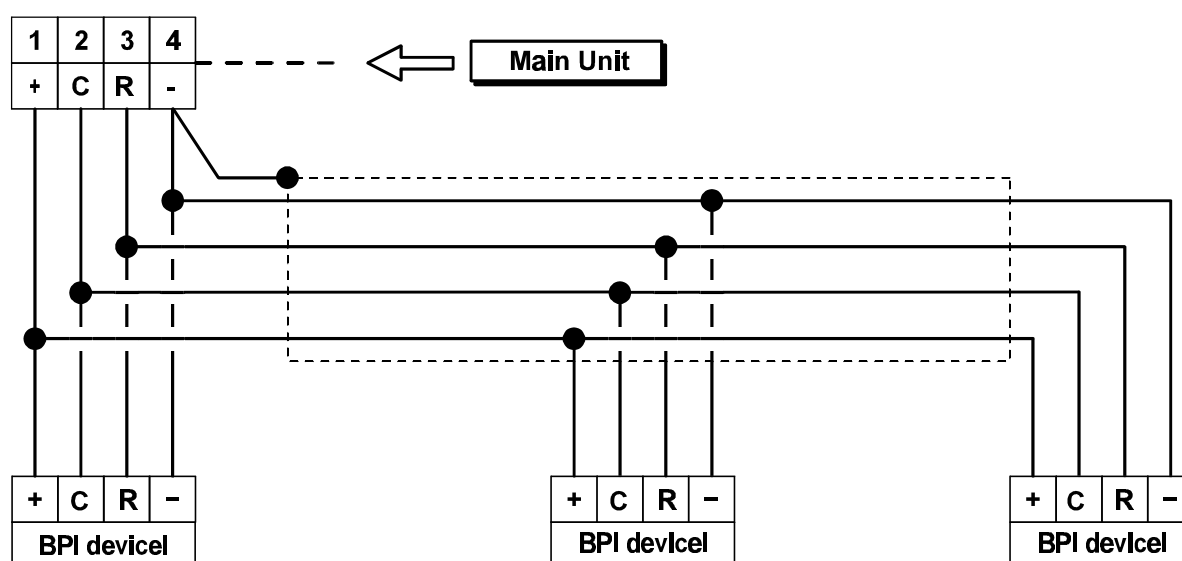

Figure 9   *Connection of control devices (keypads and key readers)*

The position of the dipswitch corresponds to the address, the following table shows 16 possible combinations.

Dipswitch No.	Address															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	off	off	off	off	off	off	off	off	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**
2	off	off	off	off	**ON**	**ON**	**ON**	**ON**	off	off	off	off	**ON**	**ON**	**ON**	**ON**
3	off	off	**ON**	**ON**	off	off	**ON**	**ON**	off	off	**ON**	**ON**	off	off	**ON**	**ON**
4	off	**ON**	off	**ON**	off	**ON**	off	**ON**	off	**ON**	off	**ON**	off	**ON**	off	**ON**

✛ - No specific order is required when assigning addresses, although, devices of the same type must have different addresses. Keypads and key readers can have the same address as they are intrinsically different.
- On initial Startup the Control panel will assign address 1 to the **Keypad** (refer to BPI configuration).
 -Dipswitch no.1 of the keypads must always be **OFF**.

■ **BPI bus length**

Due to voltage drops and stray capacitance caused by the Main Unit BPI bus connections, the BPI bus must not exceed the recommended length.

A voltage of 10 V or over, across Main Unit terminals [+] and [--] is required for proper functioning of the BPI devices. When 10 V is not available try:

➢ Increasing the wire section that supplies the voltage to the device (wires connecting terminals [+] and [--] of the Main Unit to terminals [+] and [--] of the devices).

➢ Generating power by means of a Power Station (BXM12).

✛ 500 m is the maximum cable length for the connection of any BPI device to the Main Unit. The overall cable length (connected to the BPI bus of the Main Unit) must not exceed 1,000 m.

Connection of Alarm sensors

Omnia8 has 8 independent terminals for the connection of the sensors: 5[L1], 7[L2], 8[L3], 10[L4], 11[L5], 13[L6], 14[L7] and 16[L8]). These are connected to the 8 Zones of the Control panel.

It is possible to connect sensors with Normally Closed Alarm contacts or sensors with Normally Open Alarm contacts.

More than one sensor can be connected to each terminal. However, connection of one sensor to each terminal is strongly recommended, as this will facilitate sensor identification during an Alarm.

As factory default programming is for double balanced lines, balanced resistors are included in the kit, but will not be necessary if zones are programmed as N.C. (Normally Closed) or as NO (Normally Open).

Each input zone has its own power supply from terminals +B (22) and [⏚] (6, 9, 12, 15, 18).

➢ Fuse **5** protects the power supply to the sensors.
The **TROUBLE** LED on the Keypad will go **ON** to signal **blown fuse**.

Figures 10, 11, 12 and 13 show the connection of one or more sensors to a zone.

+ The connection of tamper microswitches (terminals A.S.) is dealt with separately in the "Tamper line connection" paragraph.

22	5	6
+B	L1	⏚

⇐ Main Unit

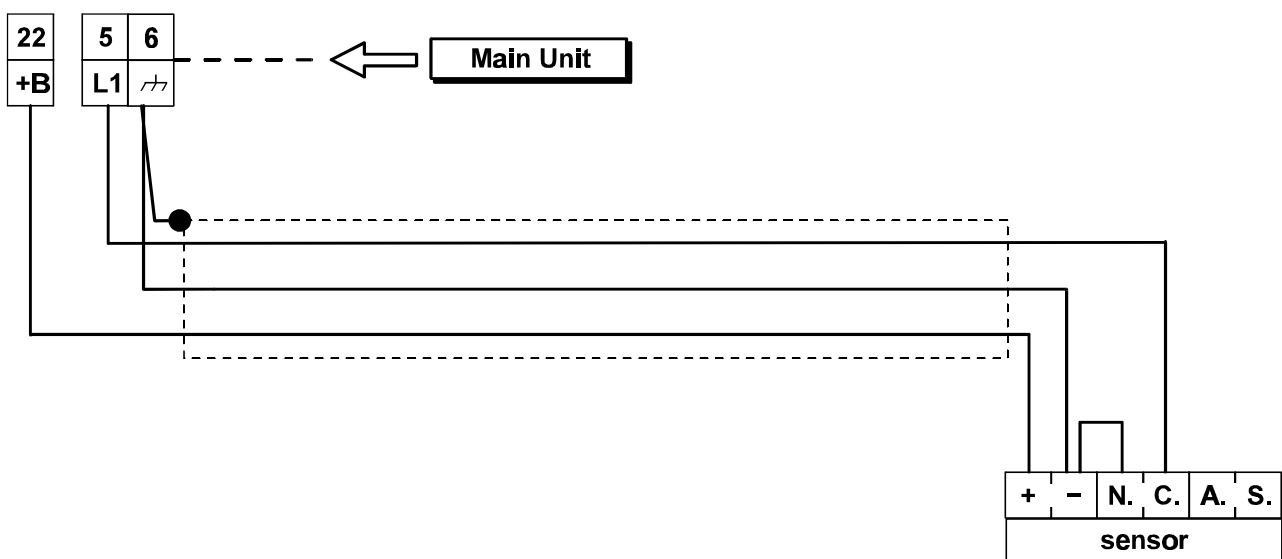| +	−	N. C.	A. S.
sensor			

Figure 10   *Connection of a sensor to a Normally Closed line*
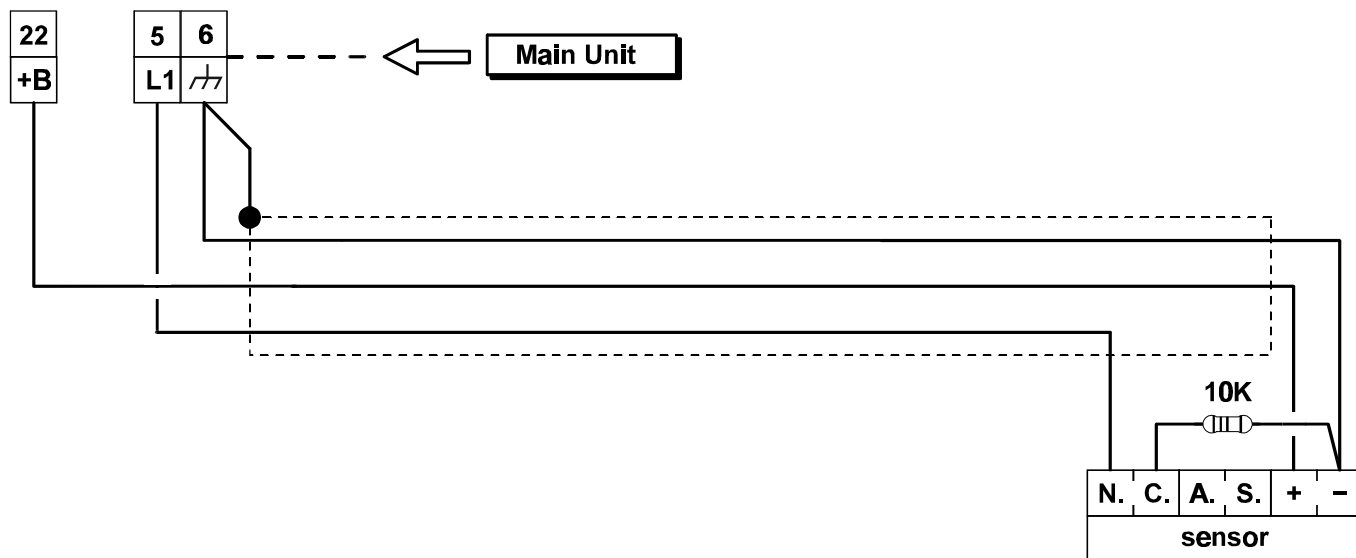
Figure 11   *Connection of a sensor to a balanced line*
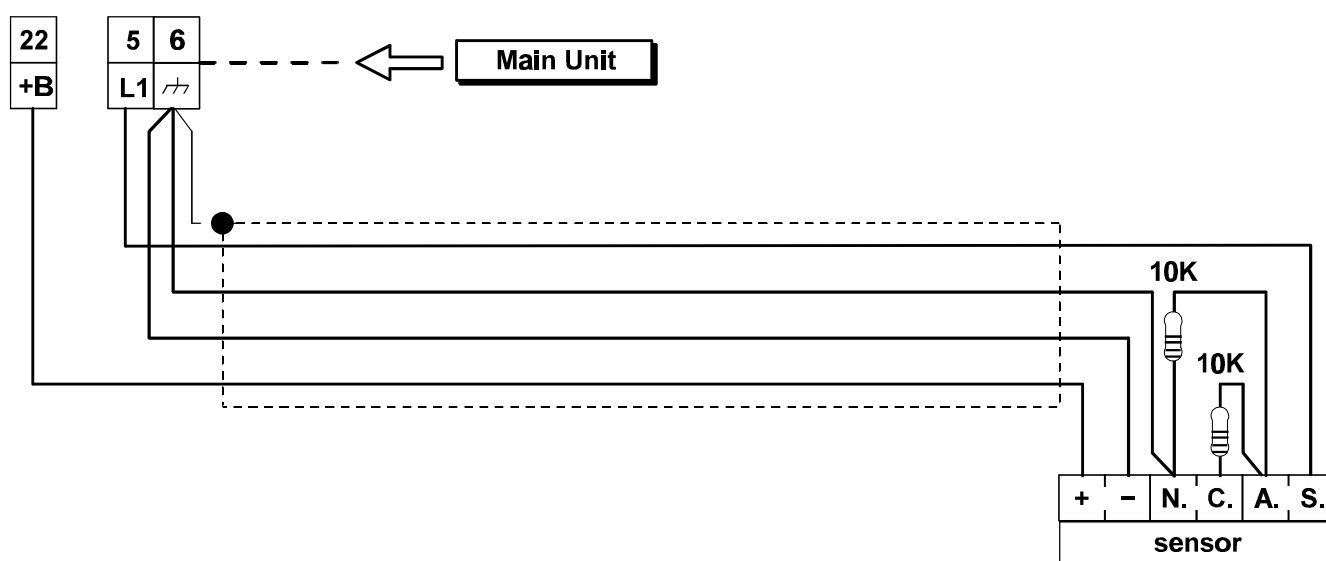
Figure 12   *Connection of a sensor with double balanced line*
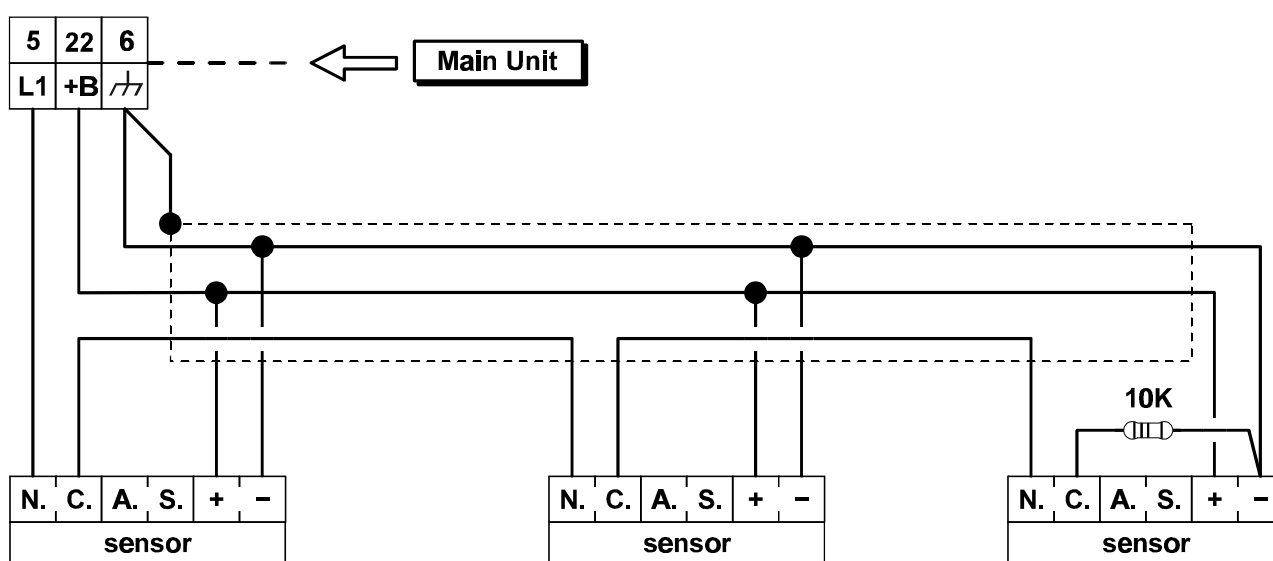
Figure 13   *Connection of three sensors on the same balanced zone*

■ Auxiliary control of sensors

Some sensors have auxiliary control inputs for Memory and the Walk Test activation.

Memory Allows identification of the sensor that generated Alarm status, and is particularly useful when more than one sensor is connected to the same line.

Walk Test During disarmed status the Walk Test LED will be enabled. During armed status the Walk Test LED will be disabled (i.e. in the event of burglary intruders will not be aware of their detection).

The signal supplied by the auxiliary outputs 23[O1], 24[O2], can be used for the above purposes.

Figure 14 shows the connection of three Bentel LB612 sensors, with positive control memory. Auxiliary output 23[O1] must be programmed as Normally Open, in order to supply the "**Disarmed**" signal (refer to "PROGRAMMING"). The Control panel output is an open-collector, therefore, a pull-up resistor will allow the sensor to accept positive control.
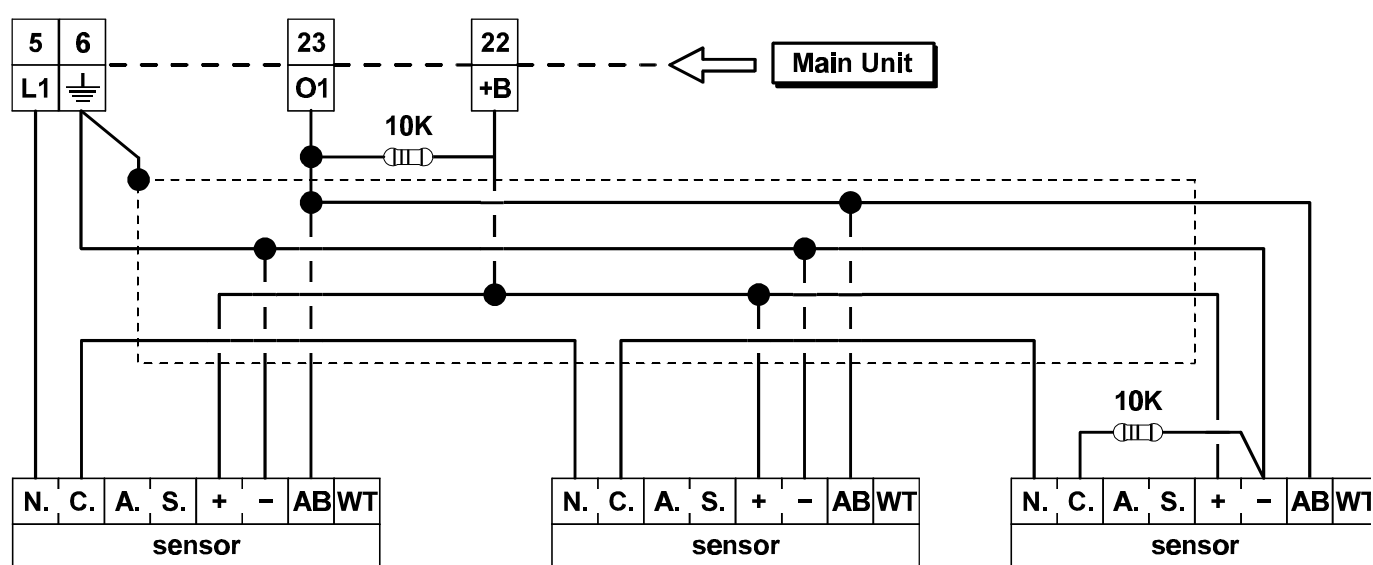
Figure 14 *Connection of three sensors with positive control memory*

■ **Fire sensors**

To connect fire sensors to the Omnia8 burglar Control panel:

1. Program a Control panel Zone as a Normally Open 24h Zone.

2. Connect to the sensor repeat output.

Figure 15 shows the connection of three rate-of-rise temperature or smoke detectors Bentel RT-101, RT-102, RF501t.

✛ - The ground of the detector lines is powered by auxiliary output 24[O2]. This output must be programmed as **Normally Closed**, otherwise, it will not supply the **Fire GND** signal (refer to "PROGRAMMING").
- A 100 mA max. current can circulate on terminal 24[O2].

Figure 16 shows the connection with line L1 as balanced and relay base. Output 24[O2] as **Normally Closed**.
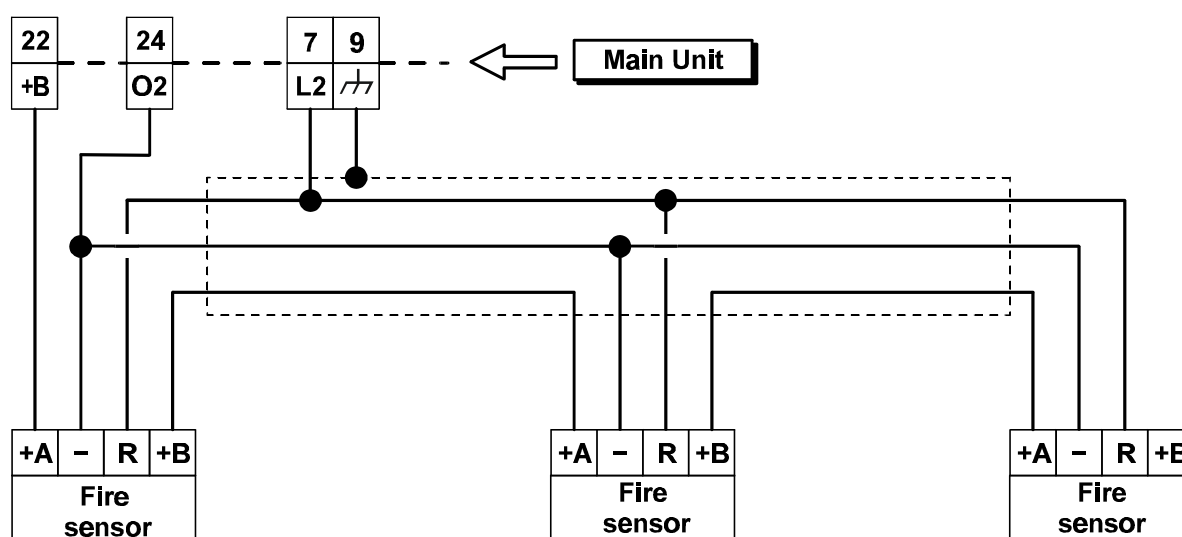
Figure 15   *Connection of fire sensors*
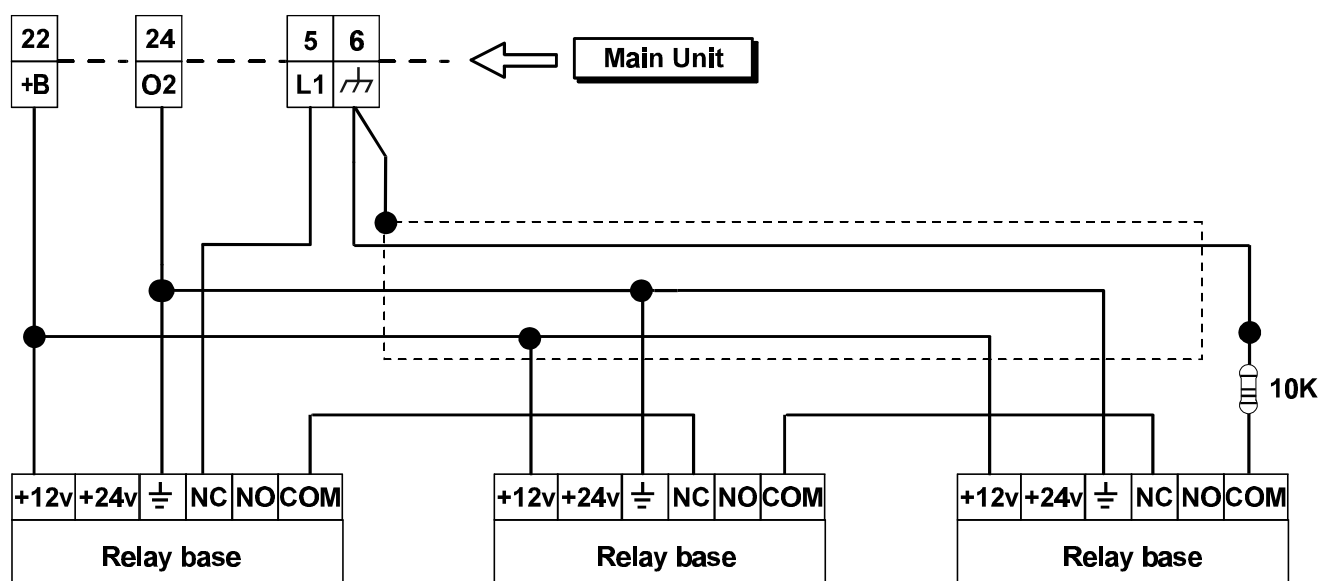
Figure 16   *Connection with a balanced line and relay base*

Connection of signalling devices

Signalling devices are: self-powered sirens, indoor sirens, telephone diallers, etc.

Signalling devices can be classified as follows:

➢ **Intrinsic security** devices activated by power failure on the specific terminal e.g. self-powered sirens.

➢ **Positive** Alarm line devices activated by positive (12 V) on the terminal e.g. indoor sirens.

➢ **Negative** Alarm line devices activated by ground on the specific terminal.

➢ **Balanced** Alarm line devices are activated by unbalanced impedance on the specific terminal.

All types of signalling devices can be connected to the voltage free alarm-relay contacts (terminals 19, 20, 21).

Figure 17 shows the connection of a self-powered siren, and an indoor siren.
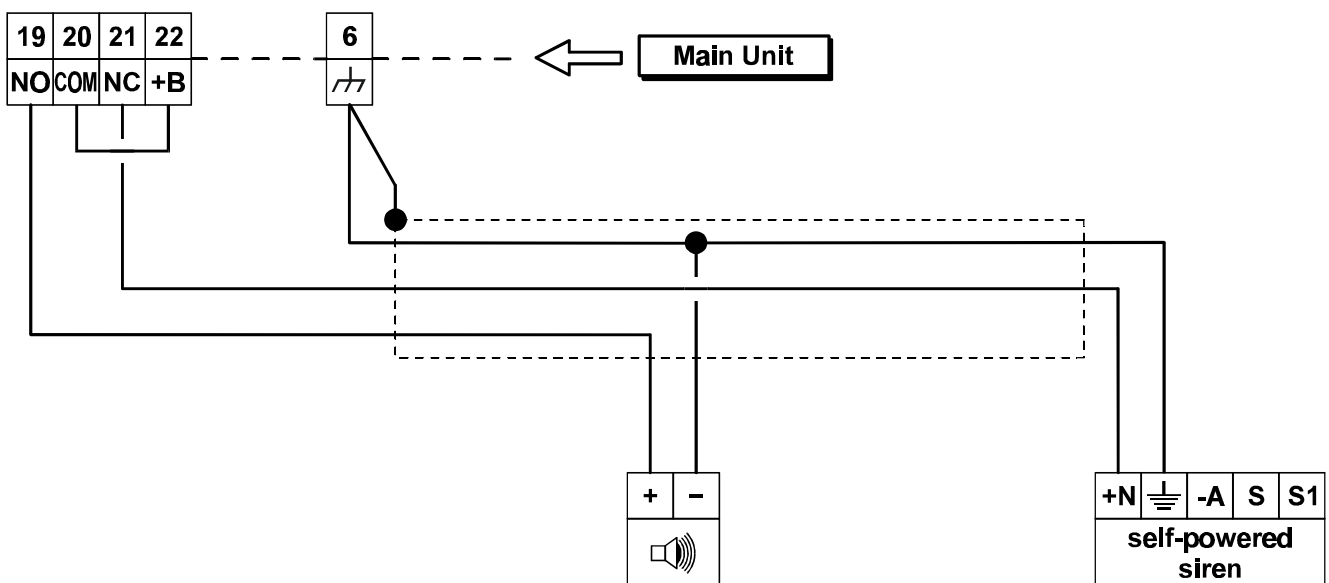
Figure 17   *Connection of self-powered siren and indoor siren*

Balanced Tamper-line connection

Omnia8 and Omnia4 have a balanced 24h Tamper line for the tamper microswitches of the Alarm system devices. Connect as follows:

1. Connect the tamper microswitches of all the security system devices in series.

2. Connect one end of the series to terminal 17[AS] and the other to terminal 18[⏚]: connect the balance resistor to the last device.

➕ The Tamper line does not identify the tampered device. If required, use the double balanced mode for sensor connection, and 24h zones for tamper identification on other devices.

Connection of auxiliary outputs

The Omnia8 and Omnia4 have 2 programmable auxiliary open-collectors: 23[O1], 24[O2]. The standby status of the output can be programmed, and the activating signals can be selected from the following: ARMED, DISARMED, TROUBLE, ALARM MEMORY, EXIT TIME, ENTRY TIME, CHIME, ARMING DELAY, FIRE GND, TELEPHONE LINE TROUBLE (refer to "Output Programming").

A 100 mA max. current can circulate on terminals 23[O1] and 24[O2] for the activation of other devices.

Several applications are dealt with in the **"Auxiliary control of sensors"** and **"Fire sensors"** paragraphs.

Below are two of the many auxiliary output applications:

➤ **Arming delay signalled on Buzzer**: connect an auto-oscillating buzzer to a power supply terminal (e.g. 22[+B]) and to the **Normally Open** auxiliary output 23[O1] ----programmed for **Entry Time** signalling.
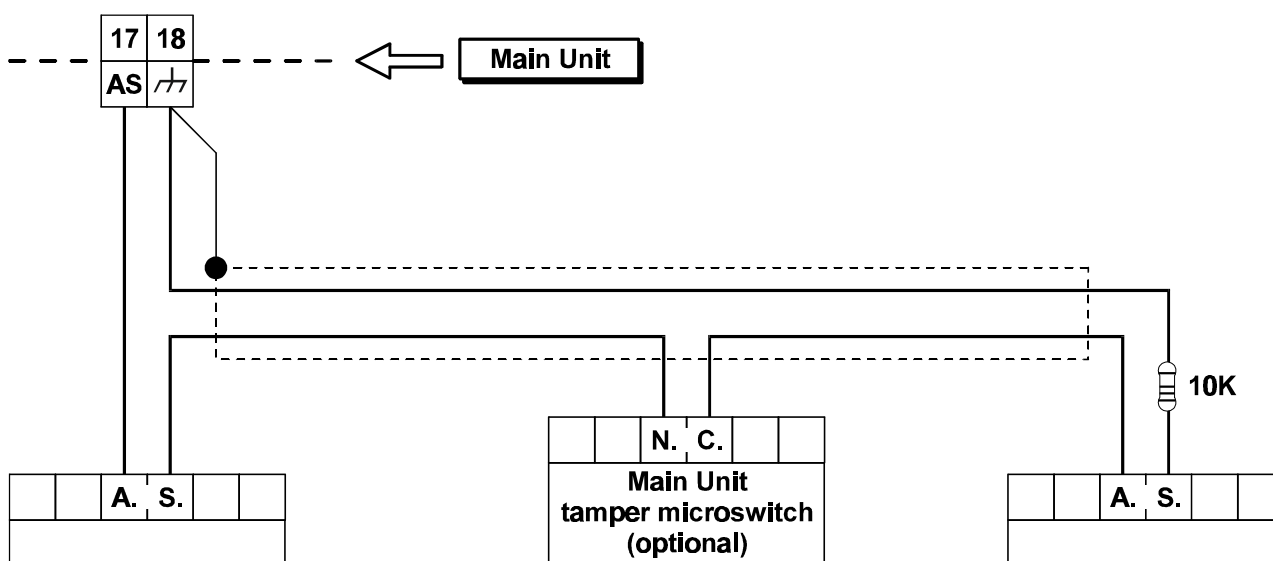
Figure 18   *Connection of tamper microswitches*

> **Courtesy lamp (during Exit Time)**: connect a relay coil to a power supply terminal (e.g. 22[+B]) and to the **Normally Open** auxiliary output 24[O2] ---- programmed for **Exit Time** signalling. Use the voltage free relay contacts to power the 230 V lamp.

Telephone line connection

In order to use the telephone communicator options, the telephone line must be connected to terminals 27 and 28 [LE]. If the telephone line is shared by another telephone device, it should be connected to terminals 29 and 30 [LI]. In this way the Control panel will give telephone-line priority to the device connected to terminals [LI], and will switch the line only when necessary.

> **ATTENTION** To protect the Telecommunication Network and PCB against surges ----connect the terminal board earth ⏚ to the Mains earth.
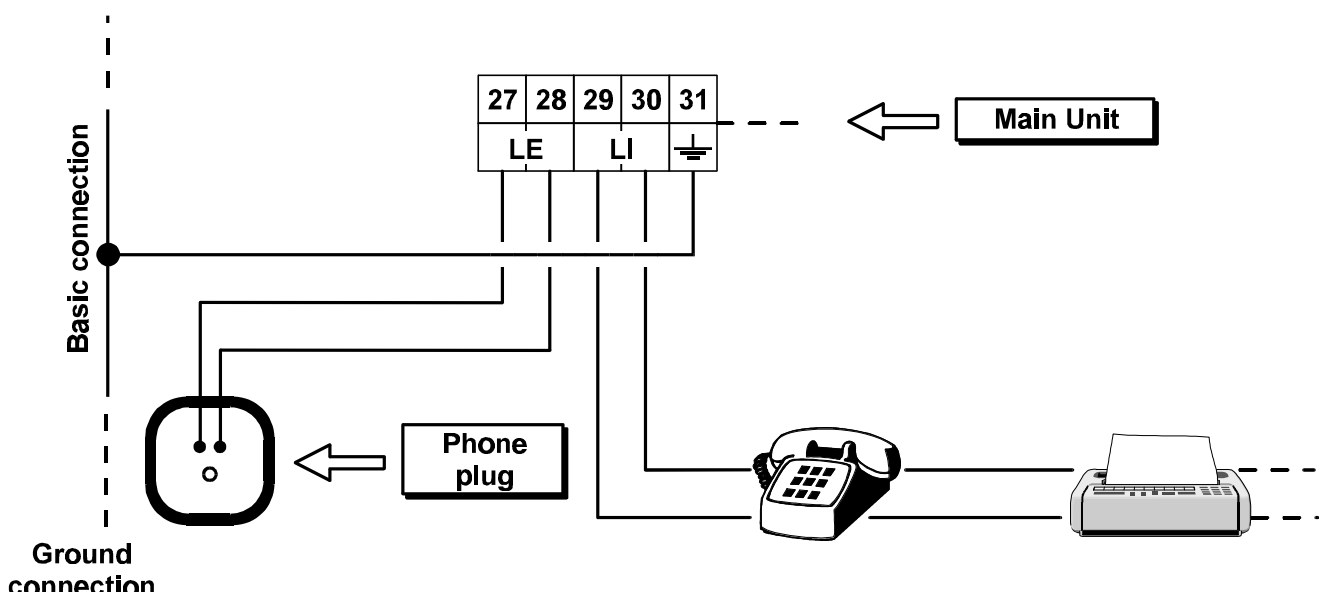
Figure 19 *Telephone line connection*

Power supply connection

The Control panel is powered by the Mains (230 V/50 Hz) through an on-board power supply.

The battery (13.8 V, 7 Ah max. not supplied) will supply the power during mains failure. Mains failure will be signalled as follows:

➢ The **TROUBLE** LED on the Control Keypad will go **ON**.

➢ Activation of one of the auxiliary outputs: 23[O1], 24[O2] ----if **programmed for "TROUBLE" signalling**.

The cause of trouble must always be found and eliminated before the battery empties. Total power failure (mains and battery) will not affect the configuration, as the non-volatile memory will save any changes made during Armed status.

To connect power supply:

1. Disable the tamper microswitch **8** (if installed).

2. Connect the **Earth** to terminal [⏚] on the terminal board **11**.

3. Connect **Neutral** to terminal [N] and **Line** to terminal [L] on the terminal board **11**.

4. Connect the battery to the battery connectors **14**.

5. Disable the Alarm Output, as per the instructions in the "Open Main Unit" paragraph.

+ Once the Main Unit is installed ----release the tamper microswitch **8** (if installed), and close the panel.

BPI bus Configuration On initial Startup the Control panel will assign address 1 to the Keypad (refer to "Device Address"). This will be the basic configuration of the system. The installer must put all the other devices in the configuration. Devices that are not in the configuration will not be controlled by the Control panel.

Stop signalling devices

To stop the Alarm output (terminals [NO-COM-NC]):

1. Disarm all partitions.

2. Enter **INSTALLER PIN** (on any keypad).

3. Press ENTER.

The current telephone call will stop, and the call queue will be cleared.

Jumper 13 Signalling devices can also be stopped by short-circuiting the connector pins **13** on the Main Unit board. It may also be useful to connect a keylock switch, which will be able to stop the signalling devices in the event of trouble on the communication bus, etc.

Open Main Unit

Before opening the Main Unit for servicing, testing etc., disable the Alarm output by accessing the programming phase, as follows:

1. Enter **INSTALLER PIN**.

2. Press ENTER to access programming.

3. Open the Main Unit.

or

1. Enter **MAIN USER PIN**.

2. Press ENTER.

3. Press ON to access programming.

4. Open the Main Unit and service as required.

5. Close the Main Unit.

6. Press ESC to quit.
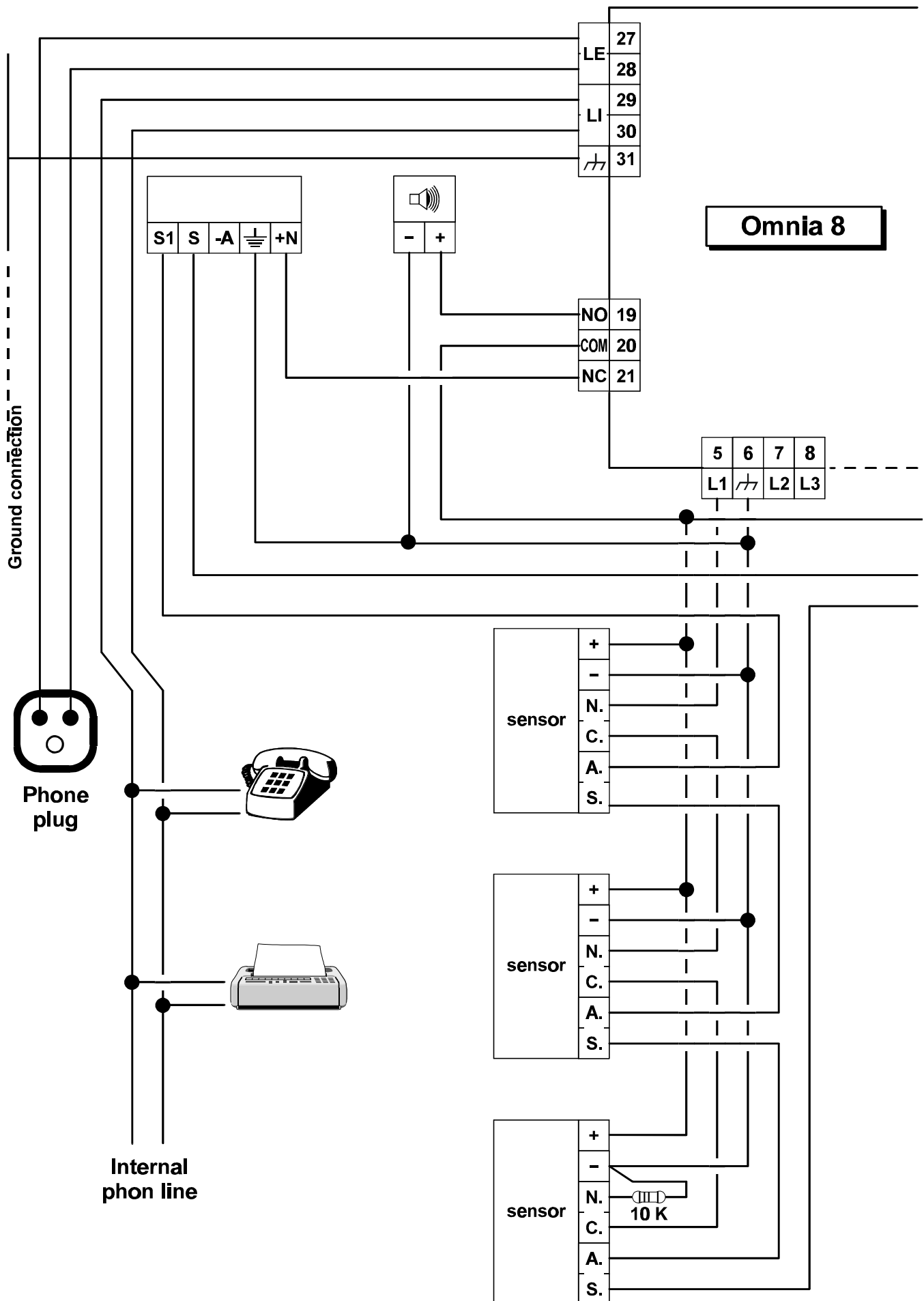
Figure 20 *Diagram of a typical installation*

Main unit

24	O2
23	O1
22	+B

4	⊥
3	R
2	C
1	+

| 16 | 17 | 18 |
| L8 | AS | ⊥ |

+A
−
R
+B

+A
−
R
+B

+A
−
R
+B

+ C R ⊥

BENTEL SECURITY

On
Off
Esc
Enter

−
R
C
+

Bus
BPI
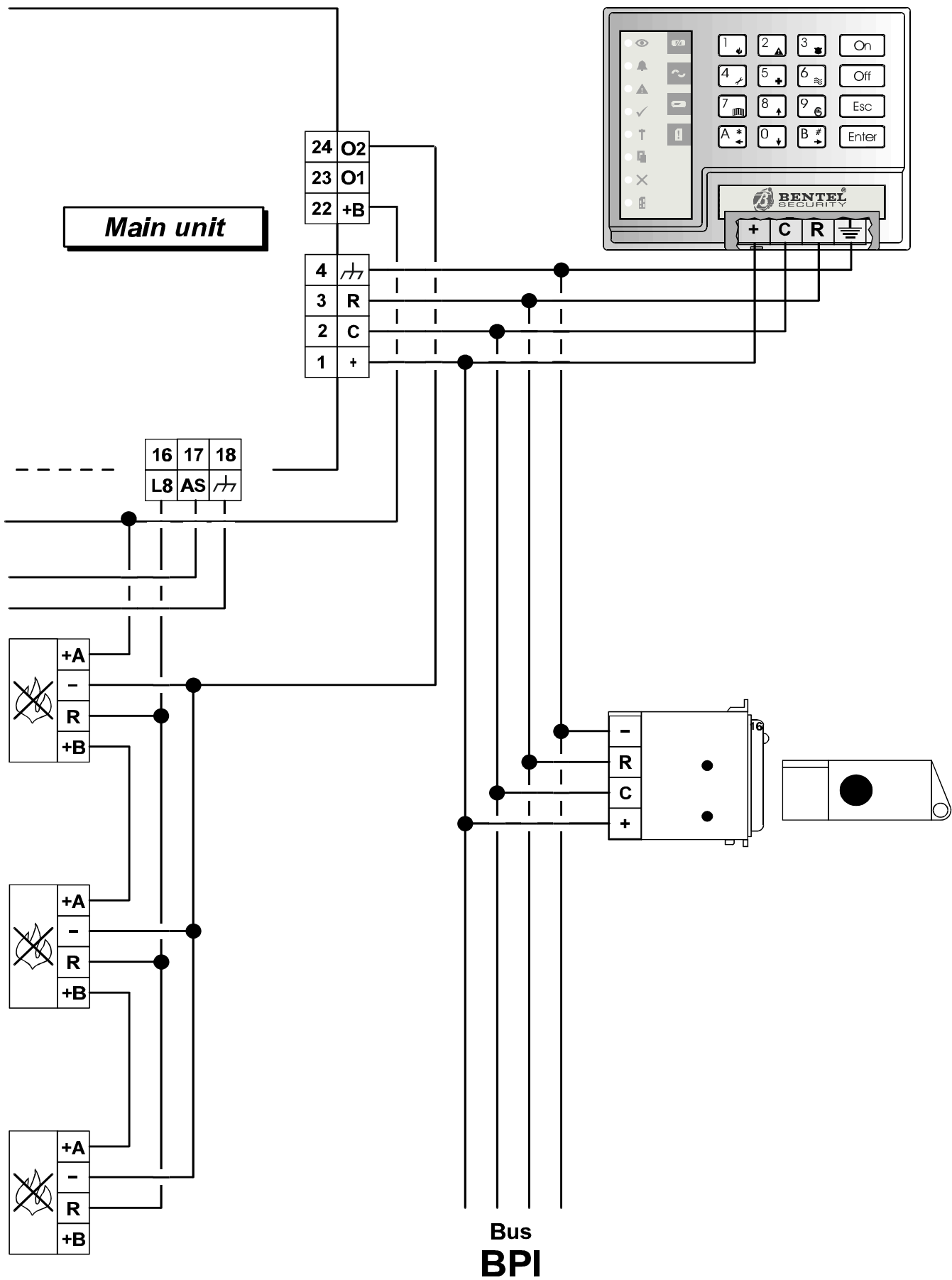
Typical installation

A diagram of a typical installation of the Omnia8 Control panel can be found in the previous pages.

From left to right:

➢ Connection of the telephone line

➢ Connection of signalling devices ----indoor siren and self-powered siren

➢ Connection of three burglar sensors to line L1

➢ Connection of three fire sensors to line L8

➢ Connection of the Tamper line

➢ Connection of one Keypad and one Key reader to the BPI bus

Please note:

➢ Line L1 must be programmed as **Balanced 10K** as there is a 10 K balance resistor.

➢ Line L8 must be programmed as **Fire**, and the auxiliary output (terminal 24[O2]) as **Fire GND** and **Normally Closed**.

The connections of the other Alarm lines are not shown, as burglar sensors are connected as per line L1, and fire sensors are connected as per line L8.

+ Use shielded cable with one end the connected to the Main Unit ground and the other connected to the device ground.

The optional **Omnia4-8 NormaCOM2** software program (runs in Windows^{TM} environment) makes quick work of control panel programming. This chapter provides in-detail information on all Omnia8 and Omnia4 parameters and, should be referred to when programming via keypad.

The parameters of each feature are grouped together in pages. The following paragraphs describe the programming pages as they appear in the program.

Customer data

The Customer's **Address**, **City**, **Customer tel. num** and **Installation description** are for Customer identification purposes only. The essential data ---- **Name**, **Control Panel** type, **Installation tel. num.** and **Customer code** should be programmed as per below. The **Firmware Release** field shows the Firmware Release selected from the **Options** menu or downloaded from the connected control panel (refer to page 74).

Name   Enter the Customer's name in this field.

Control Panel   Enter the control panel type (NormaCom2, Omnia8 or Omnia4) in this field. The corresponding features will be activated automatically in the software program (e.g. the **Zones** page will show 4 zones for Omnia4).

Customer code   Enter the Customer code in this field. This code will identify the control panel when it communicates with the OmniaMOD modem (for Teleservice or test call). Therefore, each control panel must have a different Customer code. Duplicate codes will be signalled when an attempt to save Customer data is made (the code and the control panel it is assigned to will be shown in a dialogue box).

+   The Customer code entered on the **Customer data** page will be copied automatically onto the **Teleservice** page, and vice versa.

Installation tel. num.   Enter the number of the telephone line the control panel is connected to. This telephone number will be called by the OmniaMOD modem and can be different to the **Customer tel.num.** (i.e. when more than one telephone line is available).

Accepted digits: 0 through 9, and commas **(,)**. The comma is for a 2 second pauses (e.g. between the prefix and the telephone number).

Figure 21   *Customer data page*

Search button   Use the Search button, on the Customer page, to assign the lowest Customer Code available. This method eliminates the possibility of code duplication.

Last update   This parameter will be updated automatically when changes are made to the customer data, and cannot be modified manually.

Notes   This button opens a window (notepad) for Customer notes. These notes will not appear in the **Installation description** field. If the notepad is empty, the icon (on the button) will show an empty page, otherwise, a full page will be shown.

Configuration

The specifications of the communication-bus configuration are essential for proper functioning of the system. The control panel will continuously match the current reading with the programmed configuration, and any mismatch due to the loss of any device will generate a BPI Trouble warning. In the event of tamper the control panel will generate a BPI Tamper Alarm. Any configuration changes must be made by the Installer.

+   Select the **Load > Page** option from the **Programming** menu to view the configuration.

The configuration programming page has two sections, one for keypads and the other for key readers.

Each section has a column of numbered boxes (the number corresponds to the device address). Use the peripheral device dipswitch to assign the address (refer to "Peripheral device connection").
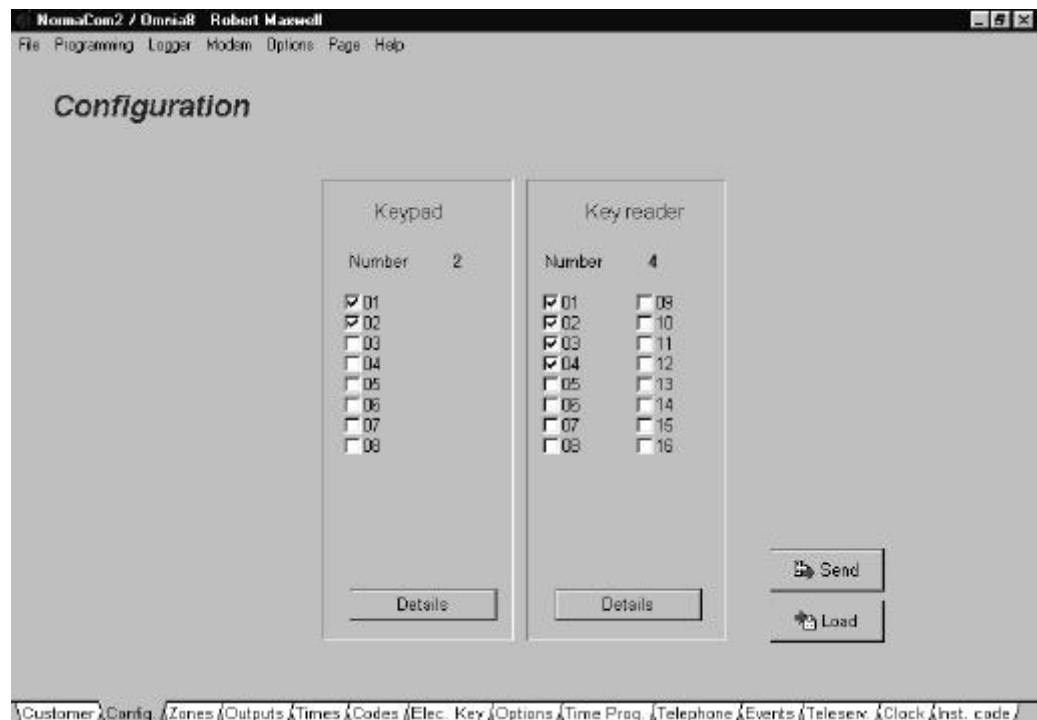

Figure 22   *System Configuration page*

Use the check boxes to select the required peripherals (box checked = peripheral in configuration; box cleared = peripheral not in configuration).

Select the **Details** button to open the required **Details** window (Keypads or Key readers) and program the peripheral parameters, as follows.

no. This is the device address and identifier number.

Description This is the device label (maximum 16 characters). The label will identify the device in all the actions it is involved in.

■ Keypads

1 ... 4 Use this row to assign the keypad to the partitions it must control (arm, disarm, etc.).

+ Keypads need not necessarily be assigned to partitions, and can be used for programming, display and other function purposes.

■ Key readers

The basic functions of the Control panel can be controlled by inserting a valid digital key into any key reader, the basic functions are:

➢ Global arming A, B

➢ Disarm partitions

➢ Stop alarm signalling on partitions

Figure 23 *Key reader page*

The Control panel can manage up to 16 devices (key readers or keypads, maximum 8 keypads including the one supplied), up to 128 digital keys and an unlimited number of clone digital keys (clones of digital key 128). The digital keys must be programmed via keypad, as per the instructions in the "Digital key" paragraph. The following paragraphs describe the key reader parameters.

RED spot (corresponds to the RED LED on the key reader)

Use this row to assign the key reader to the partitions it must control (arm, disarm, etc.). The numbers on the top row correspond to the partitions (1 through 4). **YES / NO** indicates the **enabled / disabled** status of the key reader on the corresponding partition.

When the **RED** LED is **ON** and the digital key is extracted from the key reader ----**all the enabled partitions will be armed**.

Double-click or select ENTER on the corresponding cell to toggle the status.

AMBER spot (corresponds to the AMBER LED on the key reader)

Use this row for the Type **A** arming mode configuration. The numbers on the top row correspond to the partitions (1 through 4).

When the **AMBER** LED is **ON** and digital key is extracted from the key reader ----partitions with **A** will be **armed**, partitions with **D** will be **disarmed**. Double-click or select ENTER on the corresponding cell to toggle the status.

GREEN spot (corresponds to the GREEN LED on the key reader)

Use this row for the Type **B** arming mode configuration. The numbers on the top row correspond to the partitions (1 through 4).

When the **GREEN** LED is **ON** and the digital key is extracted from the key reader ----partitions with **A** will be **armed**, partitions with **D** will be **disarmed**.

Double-click or select ENTER on the corresponding cell to toggle the status.

Zones

The **Omnia8** Main unit has **8** Input zones (terminals [Lx]), whereas, the **Omnia4** Main unit has **4** Input zones (terminals [Lx]).

The zones can be programmed as **Alarm** or **Command zones**.

Alarm zones   Violation of an Alarm zone of an armed partition (refer to "Partitions") will activate:

➢ the alarm output (terminals 19-20-21[NO-COM-NC]);

➢ the **Alarm zone no.** event (**no.** indicates the zone identifier number). One or more telephone actions (digital communicator and / or telephone dialler) can be assigned to this alarm event.

A zone which has generated an **Alarm zone no.** event must return to standby status before it can generate another (refer to "Balance types"). Persistent violation of a zone will be signalled by the corresponding key on the keypad.

The control panel will start monitoring a **Delayed** zone as soon as its partition is armed (refer to "Types"), otherwise, monitoring will start when the programmed **Exit delay** expires (refer to "Partitions).

An alarm will be generated when the zone is unbalanced for 300 ms (refer to "Balance types").

Each zone can generate alarm for the programmed number of times (refer to "Cycles").
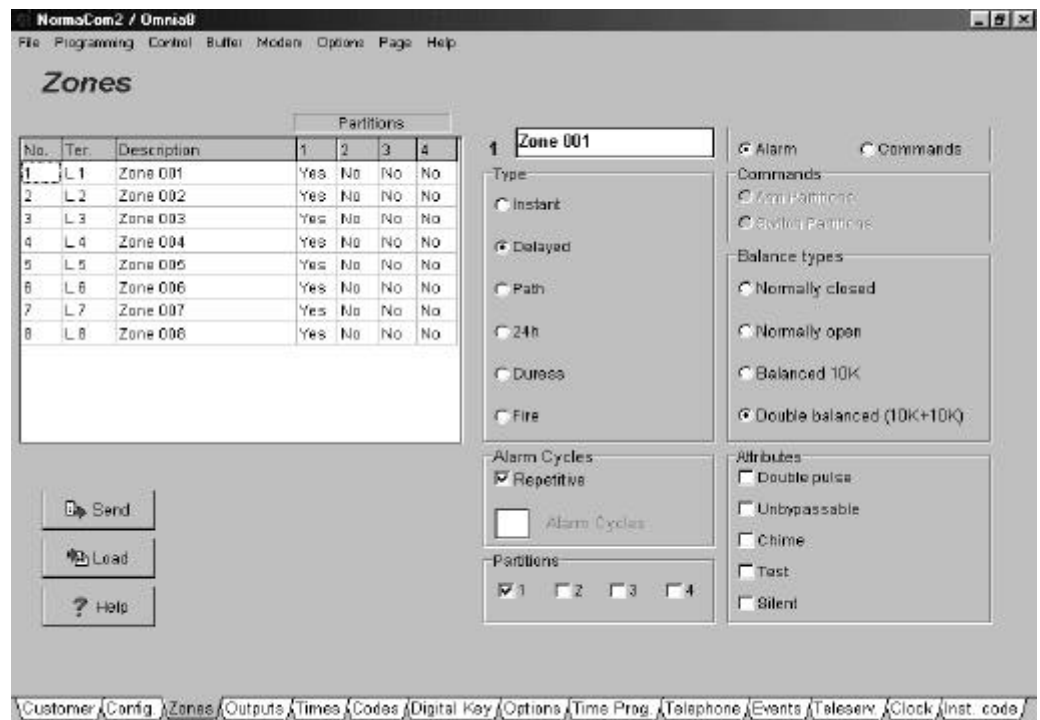

Figure 24   *Zones page*

Command zones Command zones can be programmed as either **"Arm partitions"** or **"Switch partitions"** zones.

Violation or tamper of a Command zone programmed as **"Arm partitions"** will arm the partitions the zone is assigned to.

Violation or tamper of a Command zone programmed as **"Switch partitions"** will switch the status of the partitions the zone is assigned to.

✚ Violation or tamper of a **Command zone** will not generate alarm or tamper status, it will not be signalled on the keypads, stored in the alarm memory or logged in the Event Buffer. Command zones cannot be bypassed.

■ Zone table

The Zone table on the left-hand side of the programming page shows the available zones. The Data entered on the right-hand side of the page will be transferred automatically to the table. Select the zone number (1 through 8).

no. This is the zone Identifier number that, where necessary, will be used instead of the full description (refer to "Description").

Ter. This is the abbreviation used for zone terminal.

Description This is the zone label (16 characters maximum), and will be used in all parts of the program as the zone Identifier.

Partitions These are the partitions of the zone.

■ Types

Select the required zone type from the 6 options in the "Types" section.

Instant An instant alarm will be generated if this type of alarm zone is violated during armed-unbypassed status.

Delayed Violation of an armed Delayed zone will trigger the alarm delay. If the control panel is not disarmed before the delay expires, the control panel will generate an alarm event.

✚ Violation of this type of alarm zone during the **Exit Time** delay will not generate an alarm.

Path This is the path from a Delayed zone to a disarm-point. The **Entry Time** Delay will start when the Delayed zone (entrance) is violated. The **Entry Time** Delay will give the user time to reach the disarm-point and disarm the partition. An instant alarm will be generated, if this zone is violated **before** a Delayed zone. During the **Exit Time** delay this zone type will operate in the same way as a delayed zone.

24h An instant alarm will be generated, if this zone is violated (when unbypassed), whatever the status (armed/disarmed) of the partitions it is assigned to.

Duress	This is a 24h zone type: in the event of an alarm it will disarm the system (*silent* attribute), and at the same time activate the communicator and dialler. This zone may be used for the connection of a "Silent alarm" button.
Fire	This is a 24h zone type, *Normally Open* (N.O. attribute) which can be used for fire sensor connection.

■ Command zones

Arm partitions	Violation or tamper of an **Arm partitions** zone will arm the partitions the zone is assigned to.
Switch partitions	Violation or tamper of a **Switch** partitions zone will switch the status of the partitions the zone is assigned to (armed areas will be disarmed and vice versa).

■ Attributes

Select the zone attributes from the 5 options in the "Attributes" section.

Double Pulse	This attribute **will lower** the sensitivity of the zone, as it doubles (from 300 to 600 msec.) the minimum alarm pulse time required by an alarm zone for alarm condition detection.
Unbypassable	Unbypassable zones cannot be bypassed.
Chime	Violation of a Chime zone, during disarmed status of one of its partitions, will activate the CHIME outputs of the partition the zone is assigned to.
Test	Violation of a Test zone will not activate the signalling devices, the digital communicator or dialler, and the Zone Alarm events will not be logged.
Silent	Violation of a Silent zone will activate the telephone communicator only. The alarm output will not be activated, and violation will not be signalled on the keypad.

■ Balance types

Select the zone balance type from the 4 options in the "Balance types" section. An alarm zone will signal violation when the electrical conditions of its selected balance type are present on the corresponding input terminal for at least 300 milliseconds.

+	See also Double Pulse option.
Normally Closed	The zone will be connected to negative (closed) during Standby status. The control panel will detect violation when the zone disconnects from negative (opens).
Normally Open	The zone will be open during Standby status. The control panel will detect violation when the zone switches to ground (negative).

Balanced 10K The zone will be in Standby status when it is connected to negative through a 10 K (10,000 ohm) resistor. The Control Panel will generate a tamper event if the zone switches to ground (negative). The Control Panel will generate a zone alarm if the zone is unbalanced (zone open).

Double Balanced The zone will be in Standby status when it is connected to negative through **two** 10 K (10,000 ohm) resistors. The Control Panel will generate a zone alarm if one of the resistors disconnects. The Control Panel will generate a tamper event in all other cases (open zone, zone connected to negative, etc.).

■ **Alarm cycles**

Select the number of cycles for the alarm relay (0 through 14 cycles). Each zone can be programmed separately.

No cycle The zone will not generate any alarm cycles.

Non-repetitive The zone will signal violation (alarm) for the programmed number of times. Further violation of the zone will not generate any kind of alarm until the:

➢ Control panel is rearmed.

➢ Alarm memory of one or more of its partitions is reset.

➢ Stop-alarm status ceases on one or more of its partitions (via keypad by means of a Code PIN or via key reader by means of digital key).

➢ Programming session ends (via keypad or by means of local or remote connection).

Repetitive The zone will generate an unlimited number of alarm cycles.

+ Zones with a persistent alarm condition (e.g. due to trouble) will generate one alarm cycle only, as per CEI 79/2 requirements.

■ **Partitions**

Alarm zones Assign the zone to one or more of the 4 partitions in the partition section (select the required partition). The partition codes, digital keys, and programmed times will be enabled on the zone. A violated zone with more than one partition will generate alarm when all its partitions are armed. A violated zone that can generate 24h alarms (24h zone, Duress, Fire or Zone Tamper for balanced or double balanced zones) will generate alarm whether the partitions it is assigned to are armed or disarmed. Delayed zones with more than one partition, will have the *Entry* or *Exit* times of the partition with the highest values.

Command zones Select the partitions for the programmed command.

Outputs

The Main Unit has 2 programmable open-collector outputs of 0.1 A (terminals [O1] and [O2]). All the outputs can be programmed to supply the following signals: Armed partitions, Disarmed partitions, Trouble, Alarm Memory, Exit Time, Entry Time, Chime, Arming delay, Alarm and Tamper, Fire GND, Telephone Line Trouble.

■ Outputs page

The output programming table is as follows.

Output This is the sequential number of the output on the main board.

Description This is the modifiable description of the Output.

Attributes This determines the electrical status on the output in standby status.

Partitions This determines the partitions that will effect the output. Select the required partitions. Double click on the corresponding cell to enable / disable (YES/NO).

The following output parameters can be programmed on the lower part of the page. The confirmed data entry will be shown in the table on the upper part of the page.

■ Attributes

The open-collector outputs can be programmed as either Normally Open or Normally Closed (see below).

Normally Open **Standby status:** the output will be open.
Active status: negative will be present on the output.

Normally Closed **Standby status:** negative will be present on the output.
Active status: the output will be open.

Signals

The Control panel has 2 auxiliary outputs which can be programmed as follows.

Partitions Armed The output will be activated when one (or more) of its partitions is armed.

Partitions Disarmed The output will be activated when one (or more) of its partitions is disarmed.

Trouble The output will be activated in the event of Main Unit trouble: fuse trouble; mains trouble; low battery; communication bus trouble.

Alarm Memory The output will be activated in the event of alarm memory on one, or more zones of the partition the output is assigned to.

Exit time The output will be activated during the **Exit time** of the partitions it is assigned to.

Entry time   The output will be activated during the **Entry time** of the partitions it is assigned to.

Chime   The output will be activated when a Chime zone is violated during disarmed status, of one or more of the partitions the zone is assigned to.

+   The output must be assigned to one or more of the partitions of the zone.

Arming delay   This output will be activated during the **Arming delay** of the partitions it is assigned to.

Alarm and Tamper   The output will be activated in the event of alarm or tamper on one or more zones of a partition the output is assigned to.

+   The **Alarm and Tamper** signal does not signal system tamper (Terminal [AS] unbalanced, False key, Keypad tamper).

Fire GND   The **Reset Alarm Memory** command will activate the output for 10 seconds. The keypad and Code PIN in use must be enabled on one or more of the partitions the output is assigned to.
It is possible to use an output as the negative power supply to the fire sensors. In this case, the output must be programmed with the **Normally Closed** attribute and the **Fire GND** signal. The **Reset Alarm Memory** command will cause the negative to fail for 10 seconds, and will reset the fire sensors.

Telephone line trouble   The output will be activated for 15 minutes when the telephone line current drops below 3 V for more than 30 seconds. The output will return to standby status 15 minutes after restoral.
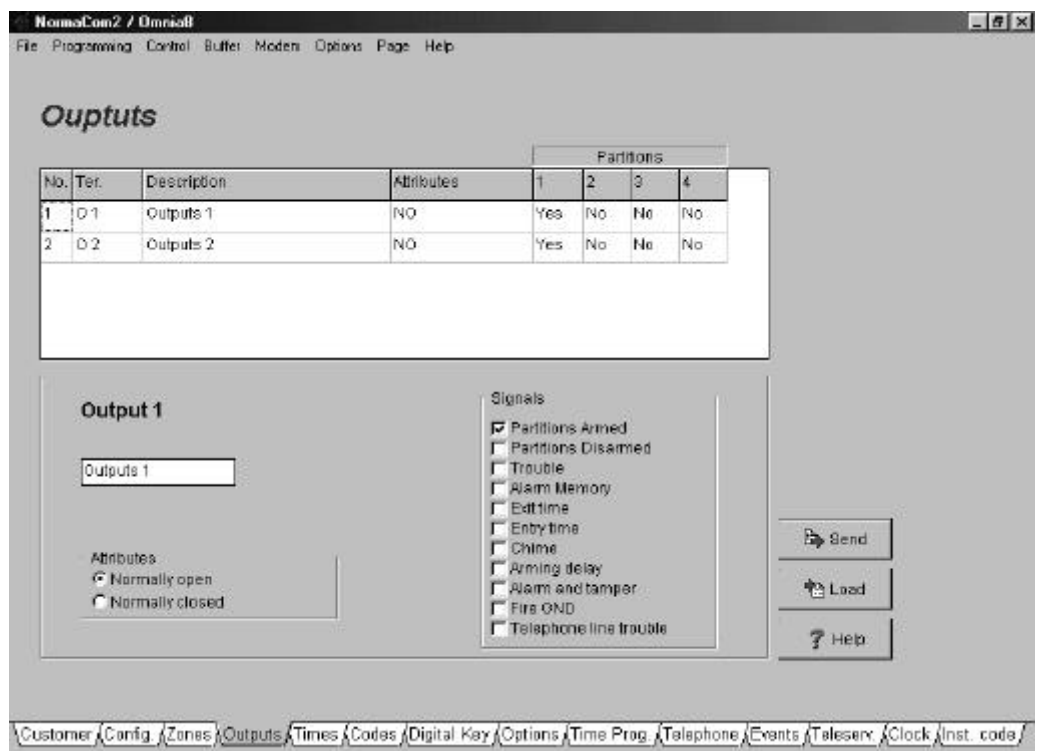

Figure 25   *Outputs page*

PROGRAMMING

45

The ***Entry time***, ***Exit time*** and ***Arming delay*** time of each partition can be programmed separately in this page.

The Control panel can manage up to 4 partitions.

The partition parameters are as follows.

no. This is the non-modifiable partition identifier number (1 ...4) which will be used instead of the partition description (refer to following paragraph).

Description This is a modifiable field for the partition name (maximum 16 characters). The name will allow proper identification of the partition and will be used in other parts of the program, and in the Event Buffer.

Entry time This setting determines the delay that will be generated by violation of a zone with ***Entry Time*** programming. ***Entry Time*** will be signalled by:

➢ activation of the corresponding partition outputs (with ***Entry Time*** programming);

➢ an audible signal (fast beep) on the enabled keypads of the partition of the violated zone.

Exit time Violation of an armed zone with ***Exit Time*** programming will not generate an alarm during the programmed delay. The delay will start when the partition is armed, and will be signalled by:

➢ activation of the corresponding outputs (with ***Exit time*** programming);

➢ an audible signal (slow beep) on the enabled keypads of the partition of the violated zone.

Arming delay time The ***Arming delay*** time must be programmed in minutes. An output must be programmed for the ***Arming delay*** signal (in order to signal the elapsing ***Arming delay*** time).

Example

The control panel will start signalling at 17.30 and will continue until 17.45 **if**:

----the Timer is programmed to arm the partition at 17.45
----the partition is programmed with a 15 minute ***Arming delay*** time
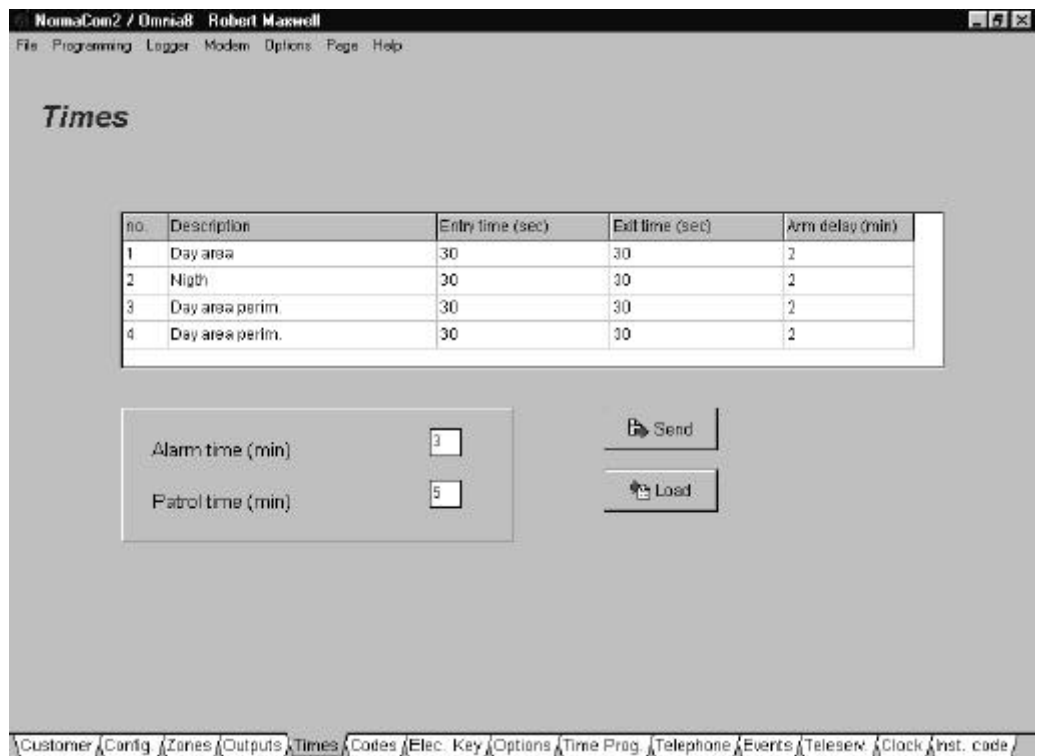----an output, assigned to the partition, is programmed with ***Arming delay*** time.

Auto arming can be delayed by 30 minute overtime requests ----**valid until 24.00** (refer to "Timer" paragraph).

Arming delay: 0 through 240 minutes with steps of 1 minute
0 minutes = No Arming delay

Patrol Time This setting determines the time between disarming of partitions ----by a Patrol Code PIN, and rearming. ***Patrol Time***: 0 through 99 minutes. The programmed time will be the same for all partitions.

Alarm Time   This setting determines the alarm cycle time. **Alarm Time**: 0 through 99 minutes. The programmed time will be the same for all zones.

Figure 26   *Times page*

Codes

This option opens the Codes page. The codes and digital keys give the Installer and User access to the system.

Each code comprises:

- PIN (4 to 6 digits)
- Type (MAIN USER, USER, PATROL, DURESS, DISABLED)
- Enabled Partitions
- Type A Arming mode
- Type B Arming mode

24 codes available The Control panel manages up to 24 codes. Codes 1 through 23 are for the users. Special code 24 is for the Installer (refer to "Installer Code" paragraph). The Installer can program the parameters of all the codes but cannot program the Code PINs.

Keypads and User Code PINs Keypads can be assigned to different partitions (refer to **Config.** page). Code PINs and keypads can control **only** the partitions where they are enabled. Therefore, an **enabled Code PIN** entered on an **disabled keypad** will have **no effect**. This dual level of control allows a Code PIN to be valid on certain partitions when used on one keypad, and on other partitions when used on another. This method of Code PIN and keypad programming simplifies usage, as the same arming procedure can be used on different keypads with different effects.

Main User This Code Type is reserved for Main Users, as it has full command of the system: Global arming, Partitioning, Global disarming, Memory Reset, Stop Alarm, Zone Bypass, Enable Teleservice and User Code PIN programming.

User This Code Type allows Global arming / disarming and Reset Alarm Memory.

Duress This Code Type allows Global arming / disarming, and should be used in the event of forced disarming, as this code will disable the system and activate the Telephone Dialler simultaneously.

Patrol This Code Type can disarm the partitions for the programmed ***Patrol time***. The partition will be rearmed automatically when the patrol time expires.

■ **Code PIN programming**

Each Code Type must be programmed with a PIN (Personal Identification Number). When the Code PIN is entered on a keypad it will identify the User, and will allow access to the programmed options of the Code in question.

+ PIN programming via PC requires connection with the control panel (via serial or modem).

To program Code PINs:

1. Select the **PIN** button on the **Codes** page.

2. Select the **Load** button ----the program will load the Code attributes (Description, Type and Partitions).

3. Enter the **PIN** of a **Main User Code** in the **Main User Code** field then select **OK**.

4. Select the Codes to be changed (from the **Code** table). It is possible to change the entered PIN, and the User Code PINs (not Main User Codes) enabled on the partitions it controls.

5. Enter the New PIN in the **New PIN** field in the **PIN Programming** section.

6. Enter the New PIN in the **Confirm PIN** field then select **OK**.

7. Repeat the procedure as required. Select the **Send** button to download the programming to the connected control panel.

Figure 27 *Codes page*

Digital keys

The Control panel can manage up to 128 different digital keys, and an unlimited number of clone keys (clones of digital key 128). Each digital key can be assigned a 16 character name in the **Electronic Key** page. The name will be used as the digital key identifier in all the operations it is involved in.

no. This is the digital key number used during the programming of a digital key on the keypad.

Description This field is for the digital key description (maximum 16 characters).

Enable This determines the status of the digital key. Disabled digital keys will not be considered false but will be unable to control the system.

Service Service digital keys can disable the system for service purposes. "YES" in the **Service** column will enable the Service attribute on the corresponding digital key, "NO" will clear this attribute. During Service mode the alarm relay will be disabled, and therefore, the control panel will not generate alarms.

1 .. 4 Use the columns 1 .. 4 to enable / disable the digital keys on the corresponding partitions.

| **Figure 28** | *Digital keys page* |

Security System Control Panels **Omnia8/4**

Options

The Control panel can be customized by means of the following options.

False digital key signalling
Option **enabled**: false digital keys will generate an alarm.
Option **disabled**: false digital keys will not generate an alarm.

+
In both cases false digital keys will be unable to operate on the system.

Immediate Mains Trouble signalling
Option **enabled**: power failure will be signalled immediately.
Option **disabled:** power failure will be signalled **after 15 minutes black-out**.

Key reader LEDs permanently active
Option **enabled**: key reader LEDs will signal control panel status at all times.
Option **disabled**: key reader LEDs will signal control panel status **only** when a valid digital key is inserted.

Reset Tamper Memory denied to User Code
Option **enabled**: only the **INSTALLER Code PIN** can Reset Tamper Memory.
Option **disabled**: **INSTALLER**, **MAIN USER** and **USER Code PINs** can Reset Tamper Memory.

Reset Alarm Memory denied to Installer Code
Option **enabled**: only **MAIN USER** and **USER Code PINs** can Reset Alarm Memory.
Option **disabled**: **INSTALLER**, **MAIN USER** and **USER Code PINs** can Reset Alarm Memory.
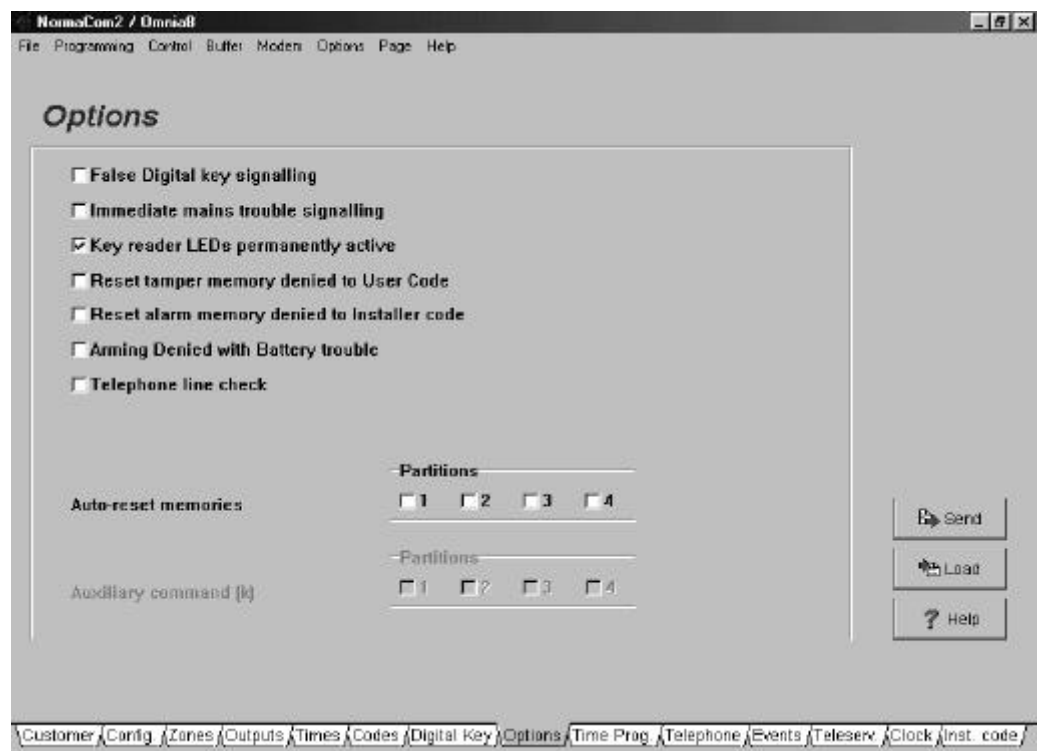
Figure 29   *Options page*

Arming Denied
with Battery
Trouble

Option **enabled**: the system **will not arm** when the battery is low.
Option **disabled**: the system **will arm** even when the battery is low.

Disable
Telephone line
check

Select this option when the control panel is not connected to the telephone line, in this way, the condition will not be signalled on the keypads (condition signalled on keypad by ⚠ = **ON** and, during Trouble viewing 0 = **ON**).

+   Telephone trouble signalling will cease approximately 15 minutes after disabling the telephone line check.

Auto-Reset
Memories

The memories of the selected partitions will reset automatically each time they are armed.

Timer

The Control panel Timer controls Auto arming of partitions.

There are two different ways of programming partitions:

Weekly Different arming times each day.

Daily The same arming times every day.

30 minute Overtime requests can be made until midnight (24.00). Overtime requests after midnight (24.00) will be ignored.

e.g. If the control panel is programmed to Auto arm at 23.45, and a 30 minute Overtime request is made, the control panel will Auto arm at 24.00 i.e. the Overtime request will be reduced to 15 minutes.

Figure 30   *Timer page*

Telephone

This page holds the 8 telephone numbers that Control panel manages, and the telephone line data.

■ Dialling

Disable Tone check
If the **Disable Tone Check** is selected the control panel will dial the telephone numbers without checking for the dial tone. This option is useful when the Control panel is connected downstream to a switchboard with *non-standard tones*.
If the **Disable Tone Check** is not selected the Control panel will check for the dial tone before dialling and, if the dial tone is not present, will hang-up and retry.

Pulse Dialling
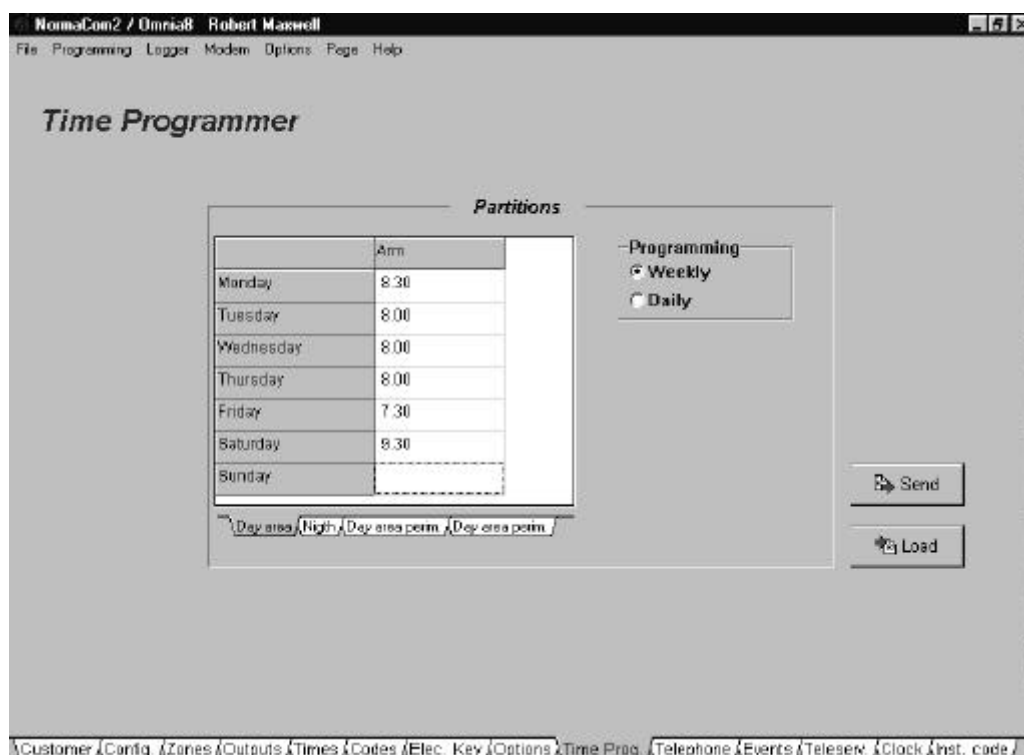If *Pulse dialling* is selected the Control panel will dial in *Pulse* mode.
If *Pulse dialling* is not selected the Control panel will dial in *DTMF* mode.
If both modes are available select *DTMF* as it is faster.

no.
This is the **identifier number** of the telephone number (1 through 8) used in place of the full number in many parts of the program.

Number
The telephone numbers in this list can be dialled by the Digital communicator, the Telephone Dialler, and can also be used for Teleservice. Each telephone number can have a maximum of 16 digits (0 through 9). The comma (**,**) is for pauses (for example, between a telephone number and area code).

Description
The telephone number description (maximum 16 characters) will identify the user.

■ Types

Use this section to define the telephone number type: **Telemonitoring**, **Teleservice**, **Voice Message** (this feature requires the NormaVOX2 board).

■ Telemonitoring

Telemonitoring telephone numbers require the following specifications.

Communication Protocol
The Central station can assign one of the following data transfer protocols:

➢ ADEMCO / SILENT KNIGHT - slow 10 baud - 3/1, 4/1, 4/2

➢ ADEMCO / SILENT KNIGHT - fast i4 baud - 3/1, 4/1, 4/2

➢ FRANKLIN / SESCOA / DCI / VERTEX - Fast 20 baud - 3/1, 4/1, 4/2

➢ RADIONICS - 40 baud - 3/1, 4/1, 4/2

➢ SCANTRONIC - 10 baud - 3/1, 4/1, 4/2

➢ CONTACT ID

$+$ The **Checksum** and **Extended** options are not available for CONTACT ID.

Customer Code This code is the control panel identifier, and is usually assigned by the Central Station.

The customer code can have 3 or 4 digits: 0 through 9 and characters A through F (hexadecimal digits). For Pulse protocols 0 is equivalent to A.

$+$ CONTACT ID requires 4 digit codes.

■ Teleservice

The **Teleservice** parameters can be programmed in the **Teleservice** page.

Figure 31   *Telephone page*

Program the events in this page. Each event can activate one or both of the following:

➢ the Digital Communicator (Pulse and DTMF);

➢ the Voice Telephone Dialler.

The events table is set out as follows:

no. This column shows the identifier number of each event.

Description This is a list of the Control panel events (refer to "Programming from key-pad" for further details).

Telephone number The selected telephone numbers (on the right side of the page) will be called when the corresponding event occurs.

Event code The event codes are usually assigned by the Central Station, and allow the Central station operators to identify the events.

The 2 digit event codes can comprise digits 0 through 9 and hexadecimal digits A through F. When Pulse protocols are used, Central Stations will identify 0 and A in the same way .

+ The 2 digit event codes will be sent to the telephone numbers assigned to Telemonitoring only (Central Stations).

Contact ID Select the **Contact ID** button to assign the codes in column **A** of the table on page 106. These codes will be sent to the lowest Identifier number of the Telemonitoring numbers with Contact ID protocol.

Delete Select the **Delete** button to delete all the event codes and to clear all the telephone numbers.

Voice message If Voice Calls are programmed for an event, the selected Voice message will be sent when the event occurs.

Figure 32 *Events page*

EVENT		OCCURS when ...
01 : 04	**Alarm Partition no.**	... one of the zones assigned to the Partition is in alarm status[1]
05 : 12	**Alarm Zone no.**	... the Zone is in alarm status[1] **N.B. Only Events no. 5** (Alarm Zone no. 1), **6** (Alarm Zone no. 2), **7** (Alarm Zone no. 3) and **8** (Alarm Zone no. 4) are valid for Omnia4.
13	**Tamper**	.... one of the following conditions occurs: Zone tamper (Balanced, Double Balanced); Terminal [AS] unbalanced, False key[2]; Keypad Tamper[3].
14	**Mains Trouble**	.... mains power fails for over the programmed time allowed (refer to the "Options" paragraph in the "Programming" chapter)
15	**Low Battery Trouble**	... the battery is low or empty, and therefore, unable to power the control panel. The battery is constantly monitored by the system (dynamic check), however, in the event of black-out a static check will be done.
16	**Fuse Trouble**	... fuse **5** blown
17	**BPI Trouble**	... one or more BPI devices fails to respond
18 : 25	**Reset Alarm Zone no.**	... standby status restored on the zone, and all alarm generating conditions no longer present **N.B. Only Events no. 18** (Reset Alarm Zone no. 1), **19** (Reset Alarm Zone no. 2), **20** (Reset Alarm Zone no. 3) and **21** (Reset Alarm Zone no. 4) are valid for Omnia4.
26	**Reset Tamper**	... alarm status ends, and all conditions that generate the tamper event (Zone tamper; Terminal [AS] unbalanced; False key[2]; Keypad Tamper[3]) are no longer present
27	**Reset Mains Trouble**	... mains power restored
28	**Reset Low Battery Trouble**	... battery recharged
29	**Reset Fuse Trouble**	... fuse **5** replaced
30	**Reset BPI Trouble**	... all BPI bus devices in the configuration respond
31	**Superkey 1**	... key 1 pressed for 4 seconds
32	**Superkey 2**	... key 2 pressed for 4 seconds
33	**Superkey 3**	... key 3 pressed for 4 seconds
34 : 37	**Partition no. Armed**	... partition armed by a Code or digital key
38 : 41	**Partition no. Disarmed**	... partition disarmed by a Code or digital key
42 : 45	**Special Arming Partition no.**	... partition armed by: Command zone; Timer; PC (via modem)

46 : 49	**Special Disarming Partition no.**	... partition disarmed by: Command zone; Timer; PC (via modem)
50 : 65	**Partitions Armed/Disarmed by Code no.**	... partition armed / disarmed by Code
66 : 81	**Partitions Armed/Disarmed by Digital key no.**	... partition armed / disarmed by a digital key
82	**Command via modem**	... partition armed / disarmed, or Zone bypassed / unbypassed via modem
83 : 86	**Reset Memory Partition no.**	... partition Alarm Memory cleared
87 94	**Bypassed Zone no.**	... zone bypassed
95 102	**Unbypassed Zone no.**	... zone unbypassed
103	**Test**	... programmed in the **Teleservice** page
104	**Telephone line trouble**	... the telephone line current drops below 3 V for over 30 seconds
105	**Reset Telephone line trouble**	... normal values for Telephone line voltage restored for over 15 minutes
106 : 109	**Partition no. Disarmed by Duress**	... partition disarmed by the Duress code
110	**Event Buffer 70% full**	... 90 events logged since last reading of the Event Buffer via PC

1   Refer to **Zones** page for the conditions that generate zone alarm and tamper.

2   Applies when the **False key** option is enabled.

3   Opening of microswitch **21** (open-panel tamper microswitch) or of **29** (pull-off tamper microswitch) on keypad.

The parameters in the Teleservice window determine the answering mode to incoming calls.

+ The Control panel will answer incoming Teleservice calls **only** when the **Teleservice** option is enabled (refer to "Enable Teleservice" paragraph in the USER MANUAL).

The Control panel will engage the line after the programmed **Number of Rings**, except when the **Double call option** is enabled.

Double call This function allows the Control panel to share the telephone line with other answering devices (answerphone, fax, etc.). The line will be engaged by the device with the least number of rings. However, if the Double call option is enabled, The Control panel will override other telephone devices when the Double call sequence is acknowledged.

Double-call sequence: the User must call the Control panel and allow **2 rings only** before hanging up, then redial within 60 seconds. The Control panel will answer on the first ring of the second call.

+ The other answering device must be programmed to answer after 3 or more rings.

+ The Double call option is managed automatically by the OmniaMOD modem.

Rings This determines the number of rings before the Control panel will answer an incoming call.

This parameter will be ignored when the Double call option is enabled.

Callback When this option is enabled NormaCOM2 will check the validity of an incoming Teleservice call by calling the number selected from the **Installer telephone number** menu. In this way authorized persons only can access Teleservice.

Customer code This shows the code assigned to the customer in the **Customer** page.

■ **Test Event**

The Test event will activate the digital, voice and teleservice calls, as per programming in the **Test** row on the **Events** page. The Test event will be performed periodically, according to the following parameters.

Enabled Select this option to enable the Test event.

Enable Test call Select this option to enable the Teleservice call. Each time the Test event occurs the Teleservice call will be sent to the telephone number selected from the **Installer telephone number** menu.

Interval Program the intermission (in days) between Test events.

Hour and Minutes   Program the time (hour and minutes) for the Test event.

Delay   Program the number of days that must expire before activation of the Test event. The delay will start when the programming phase, accessed by the Installer Code PIN, is quitted.

+   The programmed **Delay** (numbers of days) will be applied each time the programming phase, accessed by the Installer Code PIN, is quitted.

For example, if the programmed **Interval** is 7 days, with a **Delay** of 1 day, and the programming phase, accessed by the Installer Code PIN, is quitted on a Monday, the Test event will be activated every Tuesday at the programmed time. However, if the programming phase is accessed by the Installer Code PIN on a Tuesday, the Test event will be activated every Wednesday at the programmed time, and so forth.

Figure 33   *Teleservice page*

Clock

Use the clock window to set the Control panel clock.

Clock   The date and time (hour) must be entered in this field.

Date   The date must be entered in this field.

➕   Dates before 1st January 1999 are not valid.

Figure 34   *Clock page*

62   *Security System Control Panels* **Omnia8/4**
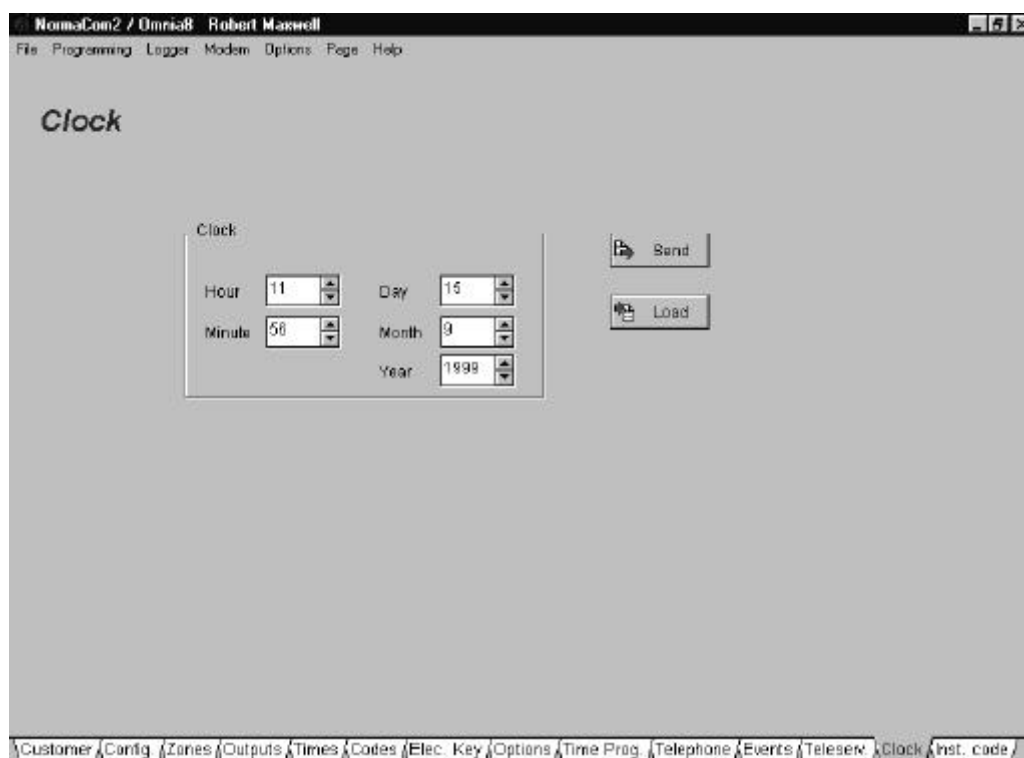
Installer code

The installer Code PIN is of utmost importance as it can access and change, via remote or local PC or keypad, all the Control panel parameters (except User Code PINs). The Installer Code PIN can be changed via keypad, modem or PC.

Current Installer Code PIN   The Installer Code PIN (for downloading to the connected control panel) must be entered in the relevant field. If the entered Installer Code PIN does not match the programmed PIN ----the request for New Installer Code PIN will be revoked.

Change Current PIN   Change the current Installer Code PIN as follows.

1. Enter New Installer Code PIN in the relevant field on the lower part of the window.

2. Confirm New Installer Code PIN (double entry is required as protection against errors).

3. Send the New Installer Code PIN to the connected Control panel.

Firmware release   Select the **Load** button to view the Firmware release of the Control panel.
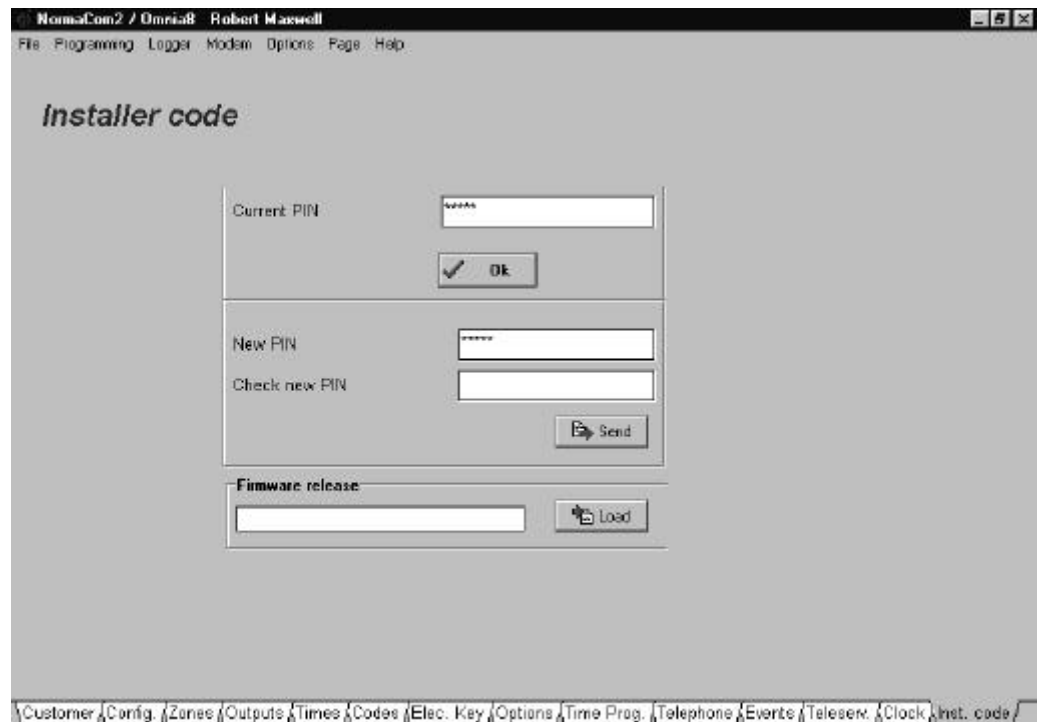
Figure 35   *Installer Code page*

The **Omnia4-8/NormaCom2** Software allows local or remote programming (via modem) of the Control panel.

Complete installation

1. Run Windows 3.1 or higher.

2. Run the SETUP.EXE program - disk no.1 of **Bortland Database Engine**.

3. Create the C:\IDAPI folder as per instructions. This folder contains the support files and must not be deleted or renamed.

◼ Installation / Update

To install:

1. Run the INSTALL.EXE program - disk no.1 of **Omnia4/8 and NormaCom2 panels management suite**.

2. Create the folder shown in the **Query Directory** window (default setting is C:\BENTEL\NC2), as per instructions.

3. To create the Bentel Omnia4-8 NormaCom2 folder - answer "YES" to the question <<Would you like me to create the program items for you?>>.

To update a previous release of the Omnia4-8/NormaCom2 package:

1. Specify the folder in the **Query Directory**.

✛ If the folder is not specified the new installation will be unable to find the Customer data. The update will maintain all Customer data, however, a backup copy of the C:\BENTEL\NC2\DATA folder should be made.

2. Run the **UpdDb** program and create the database.

✛ Fill in and mail the **Registration card**. This will entitle the user to all the package updates for **1 year** free of charge.

The **Bentel Omnia4/8-NormaCom2** folder includes the following programs.

Omnia4-8/NormaCom2 *is for Omnia4-8/NormaCom2 parameter programming and Teleservice management, through the OmniaMOD modem.*

Translat *can be used when the required language is not provided.*

UpdDb *creates and updates files required by other programs of the group. This program must be run after Omnia4-8/NormaCom2 has been installed.*

Select Language

To change the language in any of the Omnia4/8 NormaCom2 suite programs:

Select **Language** from the **Options** menu or select the **Language** button (depending on the program).

+ Use the **Translat** program if the required language is not provided.

Omnia 4-8 NormaCom2 program

This program will store the programmed parameters on the database on the PC hard disk (Customer file). The data can be loaded, changed, and sent to control panels of the same type. The OmniaMOD-V1 modem can be used for Teleservice (i.e. programming and control of the system via telephone).

The control panel parameter programming pages will be shown on startup. These pages, and the entire programming procedure, can be found in the "PROGRAMMING" chapter.

File menu

This menu contains the options for customer management as follows.

New customer   If this option is selected, and the data of the previous customer has not been saved, the program will show the message **<<Configuration Not Saved. Save ?>> YES** or **NO**.

➢ **YES** saves the data of the previous customer, and opens the New customer page with default values.

➢ **NO** cancels the last changes of the previous customer, and opens the New customer page with default values.

Open Customer   This option opens the Customer database window as shown in figure 36 (list of current customers).

Name	Customer code	Rel_Firmware	Note
Alfred Harrison	4456	1.0.0	(Memo)
Carole Floyd	0003	1.0.0	(Memo)
John King	0002	1.0.0	(Memo)
Mark Wood	0001	1.0.0	(Memo)
Maurice Ford	1259	1.0.0	(Memo)
Peter Collins	0005	1.0.0	(Memo)
Robert Maxwell	0000	1.0.0	(Memo)
Simon Clark	0004	1.0.0	(Memo)

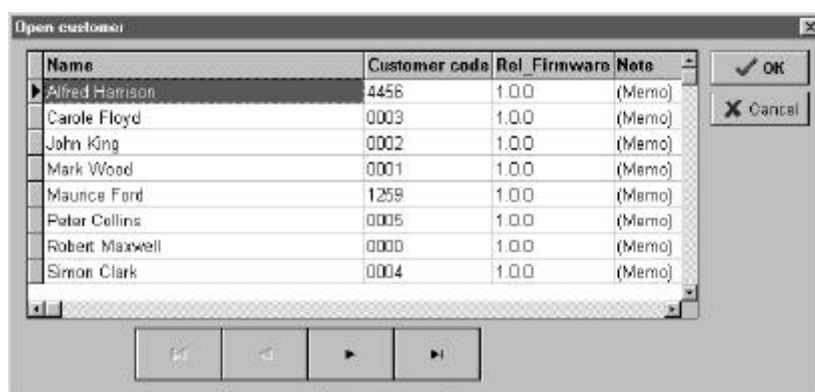**Figure 36**   *Customer*

Security System Control Panels **Omnia8/4**

To load customer data:

Double click on the required customer **or** Highlight the required customer then select the **Open** button

Save   This option saves the data on the hard disk.

+   Each customer file must have a different **Customer code**, otherwise, when an attempt to save data is made, the program will show the message **<<Already Present Continue?>> YES** or **NO**

➢ **YES** saves the new data and deletes the customer file that was previously programmed with the same code.

➢ **NO** holds the data until a new customer code is assigned.

To assign a valid code:

1.   Step back to customer page.

2.   Enter a new (valid) code.

3.   Select the **Save** button.

Delete Customer   This option opens the Customer database (list of current customers).

To delete a Customer:

1.   Select the required customer name.

2.   Select the **OK** button.

Close   This option quits the programming session. If changes have been made but not saved the program will show the message **<<Configuration not saved. Save?>> Yes** or **No.**

➢ **YES** saves the data then quits the program.

➢ **NO** cancels the last changes then quits the program.

Print   The **Print** command opens a window for printout of details and parameters of all the Customers on the database.

To print Customer details:

1.   Setup the printer (**Print Setup** button).

2.   Select the **Customer List** to start printout.

To print Customer parameters:

1.   Select the required Customers (**Print** column).

2.   Select the required pages (use check boxes).

3.   Setup the printer (**Print setup** button).

4.   Select the **Print** button to start printout.

The programmed parameters must be copied onto the corresponding control panel.

Local When this option is selected the Local connection will be used for data Loading/Sending to / from the control panel.

Remote When this option is selected, the Remote connection via Modem will be active. Therefore, the Active Remote connection will be used for data Loading/Sending to / from the control panel.

Load This option loads the programmed parameters of the connected control panel (via serial port or telephone). Loading takes approximately 2 minutes in Local mode and 7 minutes in Remote mode.

+ The Installer Code PIN and the Date and hour will not be loaded (refer to "Clock" paragraph).

Send This option downloads the current parameters onto the connected control panel (via serial port or telephone). Downloading takes approximately 2 minutes in Local mode and 7 minutes in Remote mode.

+ The Installer Code PIN and the Date and hour will not be sent (refer to "Clock" paragraph).

The **Send** and **Load** buttons (on the various pages) can send or load only the data on the active page, therefore, data transfer times are considerably less.

Figure 37 *Panel Status window*

■ **Control panel**

The **Control panel** option opens a window (figure 37) for system monitoring and control (via serial or modem).

Zones   The **Zones** section shows the following data for each control panel zone.

➢ **No. -** Identifier number

➢ **Description -** description

➢ **Partitions -** the partitions the zone is assigned to

➢ **Mem. -** GREEN = no alarms memorized; RED = alarms memorized

➢ **Al. -** GREEN = Zone in standby status; RED = Zone in alarm

➢ **Tam. -** GREEN = Zone in standby status; RED = Tamper alarm

➢ **Byp. -** GREEN = Zone unbypassed; RED = Zone bypassed

To Bypass / Unbypass zones:

1.   Enter a valid User code in the **User Code** field (the code must be enabled for zone bypass, and also enabled on the partitions of the zones to be bypassed / unbypassed).

2.   Select **OK**.

3.   Use the **Byp./UnByp.** check boxes to select the partitions to be bypassed / unbypassed (box checked = Bypassed; box cleared = Unbypassed).

+   Only the zones of the disarmed partitions, controlled by the entered User code, can be bypassed / unbypassed.

4)   Select the **Send** button.

Outputs   The **Outputs** section shows the status of the control panel outputs.

GREEN = Output in standby status; RED = Output activated

Trouble   The Trouble section shows the detected trouble.

GREEN = No trouble; RED = Trouble

Partitions   The **Partitions** section shows the following information for each partition.

➢ **No. -** partition identifier number

➢ **Description -** description

➢ **Alarm -** GREEN = Partition in standby status; RED = Partition in alarm

➢ **Armed -** GREEN = Partition disarmed; RED = Partition armed

Use the **Arm/DisA.** check boxes to arm / disarm the partitions.

Arm / Disarm the partitions as follows.

1. Enter a valid User code in the **User Code** field (the code must be enabled for partition arming / disarming, and also enabled on the partitions to be armed / disarmed).

2. Select **OK**.

3. Use the **Arm/DisA.** check boxes to select the partitions to be armed / disarmed (box checked = Armed; box cleared = Disarmed).

➕ Only the partitions, controlled by the entered User code, can be armed / disarmed.

4. Select the **Send** button.

Tamper   The Tamper section will show Tamper events:
GREEN = No Tamper; RED = Tamper

User code   To Bypass / Unbypass zones, and Arm / Disarm partitions: enter a valid User code in the **User code** field.

Reading   The Reading section shows the number of times the program has read the connected control panel status since opening the **Panel status** window .

➕ The control panel status is read every 3 seconds.

The date, time and description of each event will be logged in the Buffer (maximum of 128 events). The **Load** and **Manage** options from the **Buffer** menu manage the Control panel buffer and Customer buffer (as below).

Load   Select the **Load** option to open the **Load buffer** window (see figure 38). This window has 4 options ----**Close** - **Load** - **Save** - **Print**

Close: select the **Close** button to quit the window and step back.

Load: select the **Load** button to download the events, stored on the connected control panel memory, onto the **Load buffer** window.

Save: select the **Save** button to save new events in the open customer file.

+   If **Save** is selected, without selecting a customer, a **<<Customer Not Found>>** message will be shown ----select **OK** to step back without saving.

Print: select the **Print** button to print the events in the Load buffer window.

Manage   Select the **Manage** option to open the **Buffer management** window. This window holds the list of events logged in the open customer, and has 3 options ----**Close** - **Print** - **Delete**.
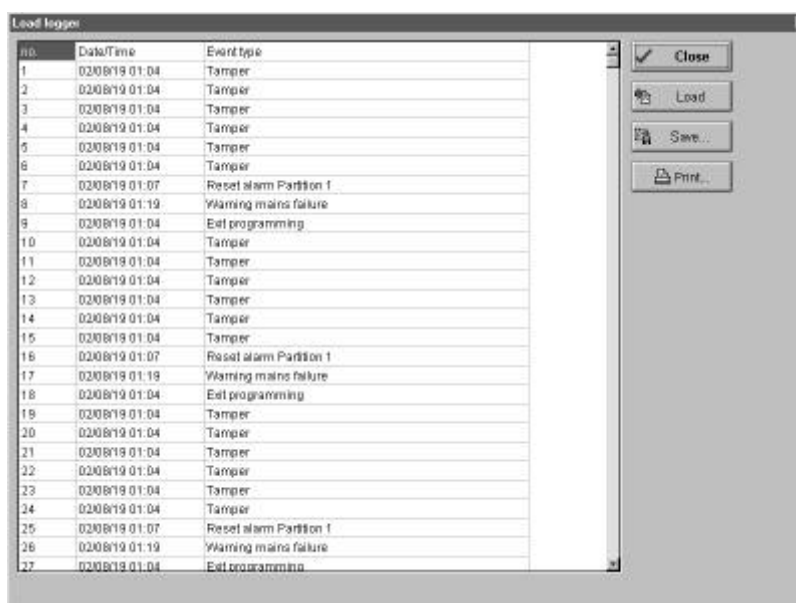
Close: select the **Close** button to quit the window and step back.

Print: select the **Print** button to print the events in the **Buffer management** window.

Delete: select the **Delete** button to open the **Clear Buffer data** window, where it will be possible to delete (clear) the events list, as follows:

1.   Enter the required date - DD/MM/YY

2.   Select the **OK** button to delete the events logged before the entered date.

If **Manage** is selected, without selecting a customer, no events will be shown and it will be necessary to close the window.

Figure 38   *Event buffer*

Modem menu

The **Modem** menu is for programming and management of remote control panels, via the OmniaMOD modem. The Modem must be connected to a serial port of the PC (refer to "Connection of control panel to PC and Modem to PC").

Connecting　To program and manage a remote control panel:

1. Select the **Connecting** option from the **Modem** menu to open the **Connection Management** window.

2. Enter the control panle telephone number in the **Telephone Number** field.

3. Program the **Disable Tone Check**, **Double Call** and **Callback** options as required.

4. Enter the Installer Code PIN in the **Installer Code** field.

5. Select the **Dial** button to start the connection procedure.

The connection sequence will be shown in the box at the bottom of the **Connection Management** window. Do not select the **OK** button until the connection has been established, and the following message appears:

OMNIA8/4 ACK
Installer code recognized

6. Select the **OK** button to confirm ----the **Connection** window will close.

The **Send** and **Load** buttons (on every page), and the **Send** and **Load** options from the **Programming** menu, will send and load data to and from the control panel that is connected via modem.

✚ Teleservice calls to the control panel cannot be answered unless the User enables the Teleservice option (refer to "Enable/Disable Teleservice" in the USER MANUAL).
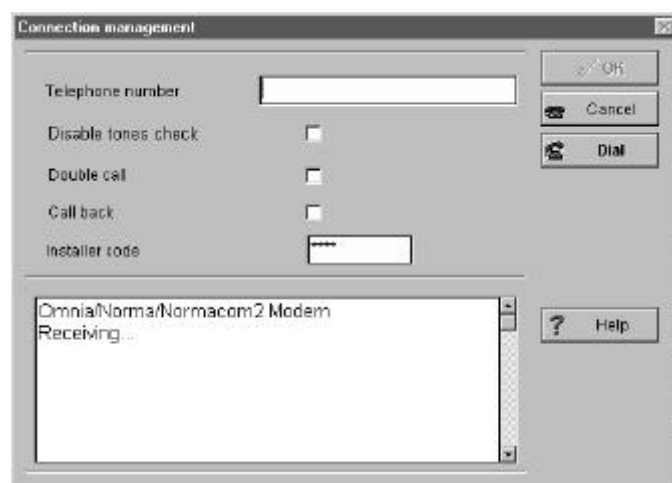
Figure 39　*Connection*

The box at the bottom of the **Connection management** window provides connection status information, as per the following messages.

Omnia/Norma MODEM v. x.xx	Shows the version of the modem connected to the PC serial port.
Modem not recognized	Modem not recognized on the selected serial port. Check the cable and the selected serial port in the **Options > Serial ports** menu.
Receiving....	The Modem / PC system is waiting for an incoming call. This is the system status when the window opens.
RING	The modem is detecting rings on the telephone line.
BACK RING	After the dialling the telephone is ringing.
NORMA ACK	A NormaCom Control Panel acknowledged.
OMNIA ACK	An Omnia Control Panel acknowledged.
OMNIA8/4 ACK	An Omnia8/4 Control Panel acknowledged.
NORMACOM2 ACK	A NormaCom2 Control Panel acknowledged.
Installer Code reading error	The Code PIN sent through the software to the Control Panel cannot be read, probably due poor quality telephone line signal.
Failed connection	Communication to the Control Panel cannot be established probably due to poor quality telephone line signal.

On-hook This option cuts the OmniaMOD connection to the telephone line. The program will request confirmation ("On Hook?"), the "On Hook OK " message will be shown after several seconds.

Setup modem Opens the OmniaMOD modem parameters window.

Clock: set the modem clock. Communications to the central station will have the corresponding date and time.

Dial mode: select the dialling mode. If both **DTMF** and **Pulse** are available ----select **DTMF** as it is faster.

Buzzer: select the operating mode of the modem buzzer. The buzzer is for audible indication of data transfer through OmniaMOD and the Control panel.

Buzzer settings:
➢ **Default** ----the buzzer will be enabled until the connection between the modem and the panel is established
➢ **Enable** ----the buzzer will be permanently enabled
➢ **Disable** ----the buzzer will be disabled

Rings: select the number of rings OmniaMOD must allow before answering an incoming call.

Options menu

Serial ports Opens the Setup window for the PC serial port for local connection of the control panel (refer to **Local**), and the serial port for OmniaMOD connection (refer to **Remote**).

Firmware Release Use this option to select the Firmware release of the control panel. The Firmware Release determines the programmable data, and can be read on the Main Unit microprocessor.
----Select **1.x** for versions 1.0 and consecutive.
----Select **2.x** for versions 2.0 and consecutive.
Mismatch between the Control panel firmware release and the selected firmware release will be signalled by a message.

Print header Use this option to program the header (40 characters maximum). The header will be printed at the top of every printout.

Password Use this option to program the password (max. 8 characters). The password will allow authorized persons only to access the **Omnia4-8 NormaCom2** program.

Language Use this option to select the language. The selected language will be active on the successive startup of the program.

Page menu

Use this option as an alternative method of selecting the parameter page (instead of using a mouse).

Help menu

Index Select this option to open **"Help Online"** index.

Version Select this option to view the **Release** and **Version** of the program in use.

Translat program

Use the **Translat** program to customize the program language.

Connection of control panel to PC and Modem to PC

Control panel PC connection   The programmed parameters must be downloaded onto the memory of the corresponding control panel. Therefore, it is necessary to make a serial connection between the PC and the connector **7** of the control panel.

Use a CVSER/9F9F serial cable (not supplied), or make the cable as per the following diagram.

If the PC serial ports have 25 pole connectors, use an ADSER/9M25F adapter (not supplied), or make the cable as per the following diagram.

The Main unit must be open during programming, therefore, only authorized personnel can access the programming phase. The User must enable the **Teleservice** option, otherwise, the control panel will be unable to answer incoming Teleservice calls (refer to "Enable/Disable Teleservice" paragraph in the USER MANUAL).

+   Specify the PC serial port used for the connection with the Control panel in the **Serial port settings** window (refer to "Serial Ports" paragraph).
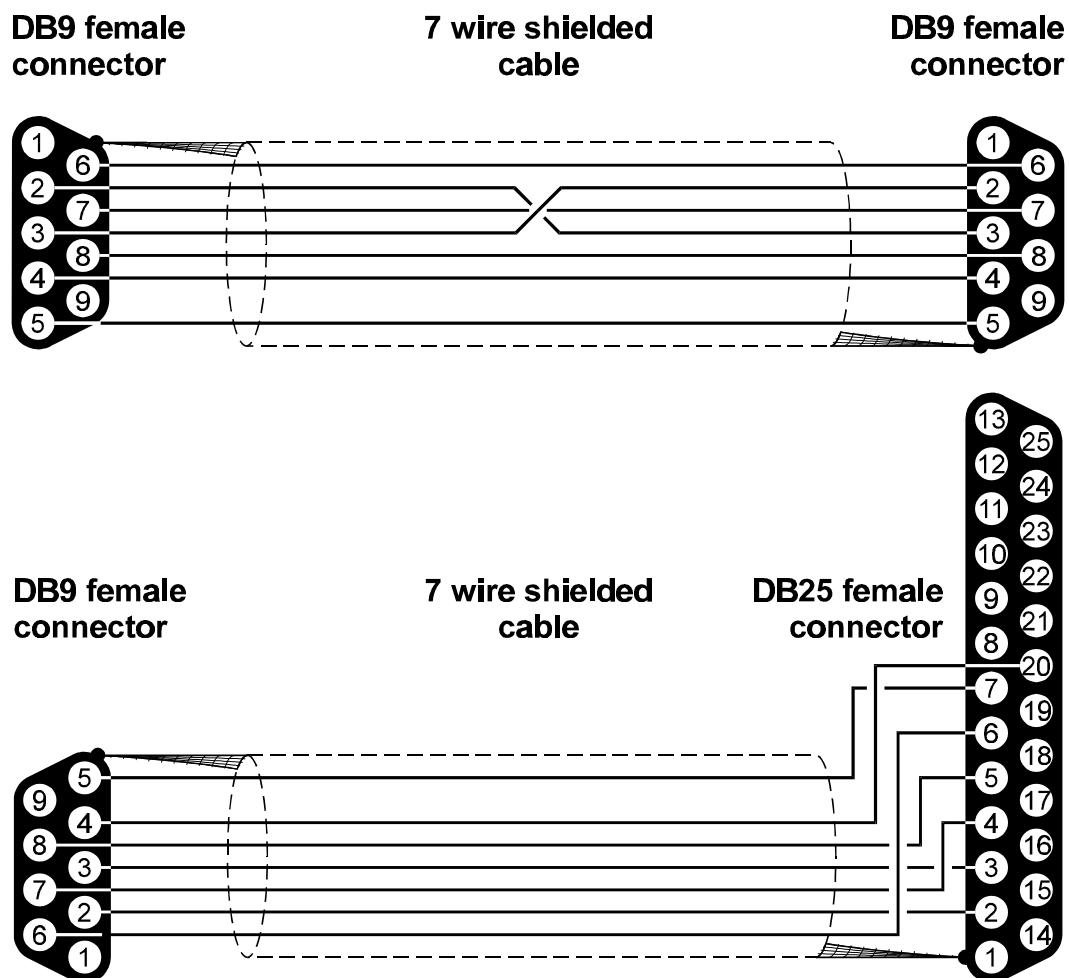
Figure 40

Use the **Send** option from the **Programming** menu to download the pro-grammed parameters to the Control panel: local downloading takes about 2 minutes, and remote downloading takes about 7 minutes.

Use the **Load** option from the **Programming** menu to view the parameter programming of the connected Control panel: local loading takes about 2 minutes and remote loading takes about 7 minutes.

To Send or Load specific programming pages:

1. Select the page.

2. Select the **Send** or **Load** button as required.

✚ The valid Installer Code Code PIN is required for this operation (refer to In-staller Code page).

PC Modem Connection The connection of the PC and modem should be made with the same type of cable as used for the connection of the PC and Control panel. To pro-gram or view the parameters of a connected control panel via telephone follow the instructions in the "Modem" paragraph.
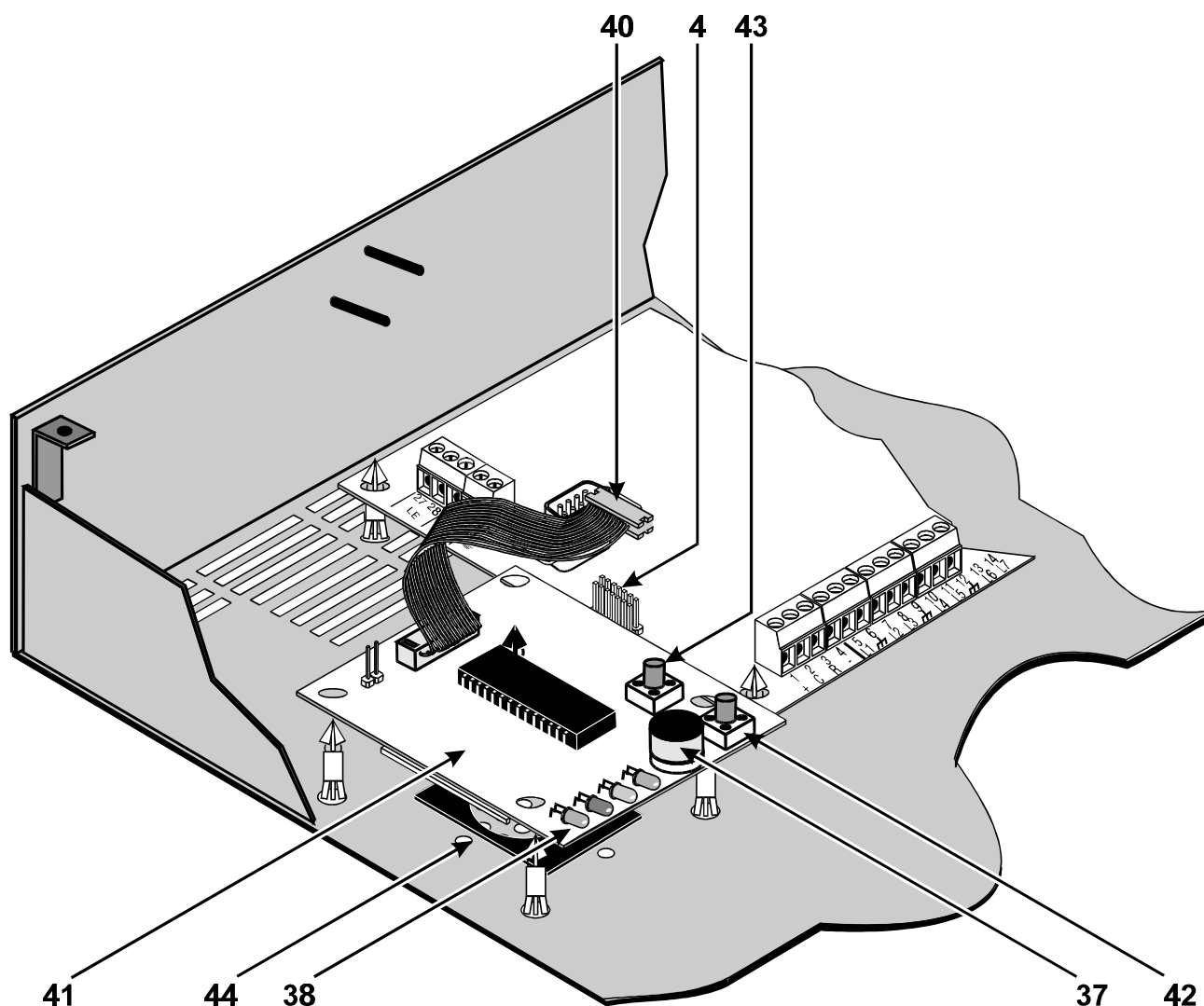
Figure 41   *Parts and installation diagram of the NormaVox2 PCB*

NormaVox2 vocal board

The NormaVOX2 voice board (optional) sends voice messages (telephone dialler). Following are the instructions for its installation on the Control panel, and the programming instructions.

■ General features

❒ Voice synthesiser for recording and playback of alarm messages

❒ Records 8 alarm messages (four 15 second messages and four 7 second messages)

❒ Repeats the alarm message up to 4 times

❒ Loudspeaker for alarm message playback

■ Parts

PART	DESCRIPTION
37	*Microphone*
38	*LEDs*
39	*Loudspeaker.*
40	*Connector for NormaVox2*
41	*Voice synthesiser*
42	*Playback button*
43	*Record button*
44	*Adhesive sound seal*

■ Installation

Install the NormaVOX2 board as follows (see also figure 41).

1. Remove the backing paper of the adhesive sound seal **44** and stick the seal to the backplate, in the middle of the four holes, as per figure 41.

2. Slot the NormaVOX2 voice board into its holder on the backplate ----microphone to the top.

3. Plug the NormaVOX2 cable **40** into the connector **4** on the Main Unit board.

4. When the NormaVOX2 is properly installed, make the necessary connections. Power the Main Unit, and record the alarm messages, as per the following instructions.

■ Record / Playback

The control panel must be in Service mode (as per maintenance). Use the jumper **13** (refer to page 10) or insert a valid service digital key into any key reader: Service mode will be signalled by fast flashing on the PRG LED on the keypad.

■ Select Message

The 8 configurations (corresponding to the 8 messages) can be seen on the green LEDs at intervals of 1 second (see Message chart below). LED 1 is the nearest to the microphone.

To select Message:

1. Hold down the buttons **42** and **43**.

2. Release the buttons when the LEDs show the required configuration.

Message No.	1	2	3	4	5	6	7	8
LENGTH (sec.)	15	15	15	15	7	7	7	7
LED 1	**ON**	OFF	OFF	OFF	OFF	**ON**	**ON**	**ON**
LED 2	OFF	**ON**	OFF	OFF	**ON**	OFF	**ON**	**ON**
LED 3	OFF	OFF	**ON**	OFF	**ON**	**ON**	OFF	**ON**
LED 4	OFF	OFF	OFF	**ON**	**ON**	**ON**	**ON**	OFF

■ Record Alarm Messages

NormaVOX2 can record up to 8 messages. Messages 1, 2, 3 and 4 are each 15 seconds long. Messages 5, 6, 7 and 8 are each 7 seconds long. To record the Alarm Message ----speak at a distance of approximately 20 cm from the microphone.

1. Hold down the button **43** ----the 4 green LEDs will flash to signal the elapsing message time.

2. Press the button **43** twice to stop the recording. Recording will stop automatically when the message recording time expires.

■ Playback

To playback the message:

1. Press the button **42** - the 4 green LEDs will start flashing.

2. Press the button **42** twice to stop playback. Playback will stop automatically when the message time expires.

■ Programming

The parameters on the **Telephone** and **Events** pages (refer to the "Programming" chapter) must be programmed carefully, in order to assure proper functioning of the Voice board. Note that the parameters in the **Events** page determine the activation of the Digital communicator and / or the Telephone Dialler, and the event calls. If several events occur simultaneously the corresponding messages will be played successively during the same telephone call.

■ Activation

The Voice call will be sent when an event assigned to a telephone number programmed with a Voice message occurs. Below is the step by step Voice call procedure (see also figure 42).

1. The Control panel will engage the connected telephone line.

2. The Control panel will wait 10 seconds for the *Dial Tone.*
    ----If the dial tone is detected, the Control panel will go to step **3.**
    ----If the dial tone is not detected the Control panel will hang up and step back to step **1.**

\+   If the switchboard operates with non-standard tones, it may be necessary to disable the **Tone Check**. In this way the Control panel will skip step **2.** and go directly to step **3.**

3. The Control panel will dial the programmed telephone number.

4. The Control panel will wait for the *Line Free* tone.
    ----If the *Line Free* tone is detected the Control panel will go to step **5.**
    ----If the *Line Busy* tone is detected the Control panel will hang up and step back to step **1.**

5. The Control panel will wait for an answer.
    ----If the call is answered the Control panel will step to step **6**
    ----If the call is unanswered the Control panel will hang up and step back to step **1.**

6. The Control panel will play the message(s) recorded on the NormaVOX2 board.

    The COntrol panel will retry for a further 8 times before quitting unanswered calls.
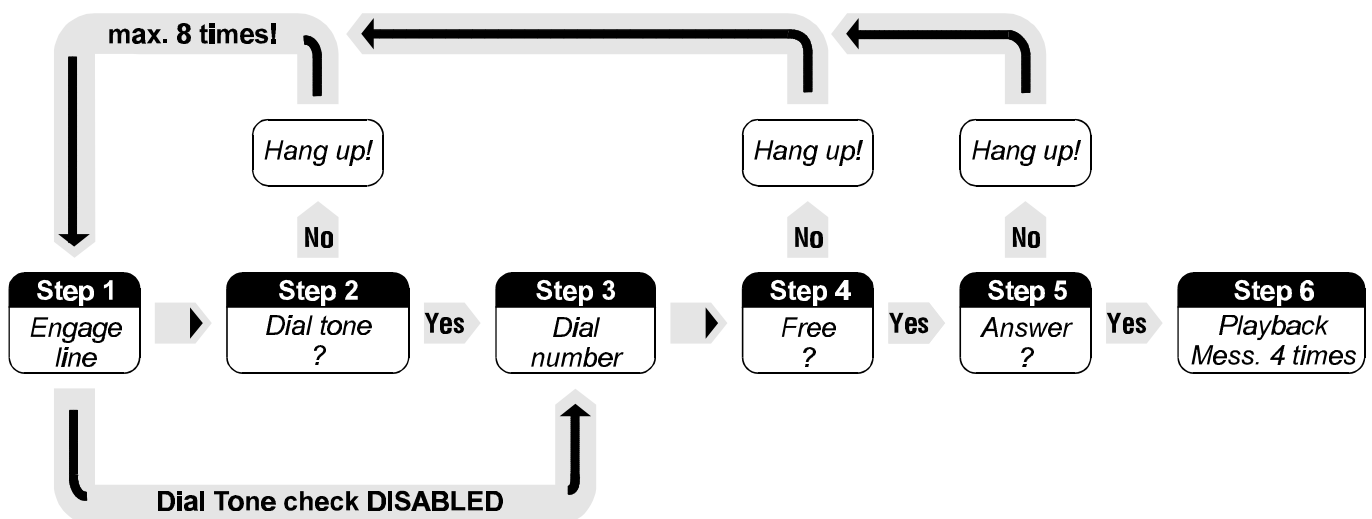
Default programming

The following table shows the Control panel default programming.

Configuration

Add.	Keypad in configuration	No.	Description	Partitions			
				1	2	3	4
01	**Yes**	1	Keypad 001	Yes	Yes	Yes	Yes
02	No	2	Keypad 002	Yes	Yes	Yes	Yes
...	"	...	...	"	"	"	"
08	No	8	Keypad 008	Yes	Yes	Yes	Yes

Add.	Key readers in configuration	No.	Description	Red				Yellow				Green			
				1	2	3	4	1	2	3	4	1	2	3	4
01	No	1	Key reader 001	Yes	Yes	Yes	Yes	D	D	D	D	D	D	D	D
...	"	...	...	"	"	"	"	"	"	"	"	"	"	"	"
16	No	16	Key reader 016	Yes	Yes	Yes	Yes	D	D	D	D	D	D	D	D

Zone

No.	Ter.	Description	Partitions				Alarm or Command	Types	Bal.	Cycles	Attr.
			1	2	3	4					
1	L1	Zone 001	**Yes**	No	No	No	Alarm	Delayed	Double Bal.	Repetitive	--
2	L2	Zone 002	**Yes**	No	No	No	Alarm	Delayed	Double Bal.	Repetitive	--
3	L3	Zone 003	**Yes**	No	No	No	Alarm	Instant	Double Bal.	Repetitive	--
4	L4	Zone 004	**Yes**	No	No	No	Alarm	Instant	Double Bal.	Repetitive	--
5	L5	Zone 005	**Yes**	No	No	No	Alarm	Instant	Double Bal.	Repetitive	--
6	L6	Zone 006	**Yes**	No	No	No	Alarm	Instant	Double Bal.	Repetitive	--
7	L7	Zone 007	**Yes**	No	No	No	Alarm	Instant	Double Bal.	Repetitive	--
8	L8	Zone 008	**Yes**	No	No	No	Alarm	Instant	Double Bal.	Repetitive	--

Outputs

No.	Ter.	Description	Attributes	Partitions				Signals
				1	2	3	4	
1	O1	Output 1	NO	**Yes**	No	No	No	Partitions Armed
2	O2	Output 2	NO	**Yes**	No	No	No	Trouble

Times

No.	Description	Entry T.	Exit T.	Delay T.	Alarm T.	Patrol T.
1	Partition 001	30 sec.	30 sec.	8 min.		
2	Partition 002	30 sec.	30 sec.	8 min.	3 min.	5 min.
3	Partition 003	30 sec.	30 sec.	8 min.		
4	Partition 004	30 sec.	30 sec.	8 min.		

Codes

No.	Description	Type	PIN	Partitions 1	2	3	4	A 1	2	3	4	B 1	2	3	4
1	Code 001	Main User	0001	**Yes**	**Yes**	**Yes**	**Yes**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**
2	Code 002	User	0002	**Yes**	**Yes**	**Yes**	**Yes**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**
3	Code 003	Duress	0003	**Yes**	**Yes**	**Yes**	**Yes**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**
4	Code 004	Patrol	0004	**Yes**	**Yes**	**Yes**	**Yes**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**
5	Code 005	Disabled	0005	No	No	No	No	--	--	--	--	--	--	--	--
6	Code 006	Disabled	0006	No	No	No	No	--	--	--	--	--	--	--	--
7	Code 007	Disabled	0007	No	No	No	No	--	--	--	--	--	--	--	--
8	Code 008	Disabled	0008	No	No	No	No	--	--	--	--	--	--	--	--
9	Code 009	Disabled	0009	No	No	No	No	--	--	--	--	--	--	--	--
10	Code 010	Disabled	0010	No	No	No	No	--	--	--	--	--	--	--	--
11	Code 011	Disabled	0011	No	No	No	No	--	--	--	--	--	--	--	--
12	Code 012	Disabled	0012	No	No	No	No	--	--	--	--	--	--	--	--
13	Code 013	Disabled	0013	No	No	No	No	--	--	--	--	--	--	--	--
14	Code 014	Disabled	0014	No	No	No	No	--	--	--	--	--	--	--	--
15	Code 015	Disabled	0015	No	No	No	No	--	--	--	--	--	--	--	--
16	Code 016	Disabled	0016	No	No	No	No	--	--	--	--	--	--	--	--
17	Code 017	Disabled	0017	No	No	No	No	--	--	--	--	--	--	--	--
18	Code 018	Disabled	0018	No	No	No	No	--	--	--	--	--	--	--	--
19	Code 019	Disabled	0019	No	No	No	No	--	--	--	--	--	--	--	--
20	Code 020	Disabled	0020	No	No	No	No	--	--	--	--	--	--	--	--
21	Code 021	Disabled	0021	No	No	No	No	--	--	--	--	--	--	--	--
22	Code 022	Disabled	0022	No	No	No	No	--	--	--	--	--	--	--	--
23	Code 023	Disabled	0023	No	No	No	No	--	--	--	--	--	--	--	--

Digital keys

No.	Description	Enable	Servizio	Partitions 1	2	3	4
1	Digital key 1	No	No	No	No	No	No
...	...	"	"	"	"	"	"
128	Digital key128	No	No	No	No	No	No

Options

Description	Default
False Digital key signalling	No
Immediate mains trouble signalling	No
Key reader LEDs permanently active	**Yes**
Reset tamper memory denied to User code	No
Reset alarm memory denied to Installer code	No
Arming Denied with Battery .rouble	No
Telephone line check	No

	Partitions 1	2	3	4
Auto-Reset Memories	No	No	No	No

Timer Prog.

| Partition | Weekly | | | | | | | Daily |
	Mon	Tue	Wed	Thurs	Fri	Sat	Sun	
Partition 001	--	--	--	--	--	--	--	--
Partition 002	--	--	--	--	--	--	--	--
Partition 003	--	--	--	--	--	--	--	--
Partition 004	--	--	--	--	--	--	--	--

Telephone

No.	Num.	Description	Type	Protocol	Cust. Code	Check sum	Dis. Tone check	Pulse Dialling
1	--	Tel. number 001	Telemonitoring	Contact ID	0000	--		
2	--	Tel. number 002	Voice message	--	--	--		
3	--	Tel. number 003	Voice message	--	--	--		
4	--	Tel. number 004	Voice message	--	--	--	No	No
5	--	Tel. number 005	Voice message	--	--	--		
6	--	Tel. number 006	Voice message	--	--	--		
7	--	Tel. number 007	Voice message	--	--	--		
8	--	Tel. number 008	Voice message	--	--	--		

Events

| No. | Description | Telephone numbers | | | | | | | | Event Code | Voice message |
		1	2	3	4	5	6	7	8		
1	Partition Alarm 1 (Partition 001)	No	No	No	No	No	No	No	No	00	--
...	...	"	"	"	"	"	"	"	"	"	"
110	Event Buffer 70% full	No	No	No	No	No	No	No	No	00	--

Teleservice

Double Call	No. rings	Callback	Test Event
No	4	No	No

Installer Code   The factory default Installer Code PIN is 0024

■ Reset Default

To Reset the default programming, and to restart system programming:

1. Disconnect power supply from Mains and battery.

2. Wait 10 seconds.

3. Restore power to the system by short-circuiting pins **2** and **3** of the connector **7**.

+ The **Reset Default** procedure will not effect the Digital key programming. Therefore, all the programmed digital keys will remain valid. To invalidate digital keys new random codes must be generated.

Alarm / Restoral Event Codes for CONTACT ID

The following table shows the Alarm / Restoral Event Codes for CON-TACT: the non-modifiable part of the code is shown in brackets.

Medical Alarms		Duress	(1)21	Sensor Tamper	(1)44
Medical	(1)AA	Silent	(1)22	Module Tamper	(1)45
Pendant Transmitter	(1)A1	Audible	(1)23	**24 hour Non-Burglary**	
Fail to Report In	(1)A2	**Burglar Alarms**		24 hour non-burglary	(1)5A
Fire Alarms		Burglary	(1)3A	Gas detected	(1)51
Fire Alarm	(1)1A	Perimeter	(1)31	Refrigeration	(1)52
Smoke	(1)11	Interior	(1)32	Loss of Heat	(1)53
Combustion	(1)12	24 Ore	(1)33	Water Leakage	(1)54
Water Flow	(1)13	Entry / Exit	(1)34	Foil Break	(1)55
Heat	(1)14	Day / Night	(1)35	Day Trouble	(1)56
Pull Station	(1)15	Outdoor	(1)36	Low Bottle Gas level	(1)57
Duct	(1)16	Tamper	(1)37	High temperature	(1)58
Flame	(1)17	Near alarm	(1)38	Low Temperature	(1)59
Near Alarm	(1)18	**General Alarms**		Loss of Air Flow	(1)61
Panic Alarms		General Alarm	(1)4A		
Panic	(1)2A	Exp. Module Failure	(1)43		

Trouble warnings

◇ **Trouble LED on keypad is ON**

Use Superkey [5 ♦] *to activate the Trouble viewing mode (refer to USER MANUAL) and identify the type of Trouble. When the type of trouble is identified see the corresponding trouble warning (as below).*

◇ **Key** [1 ↵] **ON during Trouble Viewing Mode**

Check that fuse 5 is intact. If the fuse has blown find and illiminate the cause (short-circuit on terminals [+B] or [+]). Replace the fuse (250 V - 3 A).

◇ **Key** [4 ↗] **ON during Trouble Viewing Mode**

Check the voltage on terminal 11.

◇ **Key** [7 ▥] **ON during Trouble Viewing Mode**

Check the polarity on the connectors 14.
For inverted polarity ----connect the battery properly and replace fuse 6 (250 V - 8 A).
For low battery ----recharge or replace the battery as required.

◇ **Key** [A ✳] **ON during Trouble Viewing Mode**

Check that at least one keypad is connected, and that all the connections and addresses of the control devices are done properly (refer to "Connection of the control devices").

◇⁇ **Communicator cannot engage the telephone line**

For telemonitoring calls check that:
➢ *the alarm generating event is coded;*
➢*the Central Station telephone number, activated by the call generating event, is programmed properly.*
For voice calls check that:
➢ *the telephone number is programmed properly;*
➢ *the telephone number is programmed as "Voice-call" and a voice-call message is programmed for the event in question.*

◇⁇ **The communicator engages the telephone line but cannot complete the call**

Check that:
➢ *the dial tone is correct, if not, disable the* **Tone Check***;*
➢ **the telephone line (connected to the Control panel) supports the programmed dialling mode***;*
➢ *the telephone number is correct (N.B. When connected to a switchboard etc. ----the first number should be the number that will engage the PSTN line).*
For telemonitoring calls check that:
➢ *the programmed protocol is used by the Central Station;*
➢ *the Customer Code is programmed properly;*
➢ *the call generating event code is programmed properly.*

◇⁇ **The Personal Computer cannot connect to the Main Unit.**

Check that:
➢ *the system is disarmed, and is not in the programming phase;*
➢ *the serial port is the correct one, and is functioning properly;*
➢ *the connections correspond to those indicated on page 75 ----for self-made serial cables.*

For in-detail information on the following parameters and options refer to the **"PROGRAMMING"** chapter.

All the Control panel parameters can be programmed from the Keypad. Only the **INSTALLER PIN** and **MAIN USER PINs can access** the programming phase.

+ The Control panel will be **out of service** (alarm output disabled) during the programming phase.

■ **Restrictions**

The Installer can program all the control panel parameters, with the exception of Code PINs 1 through 23.

The Main User can program Code PINs 1 through 23, but not the Code parameters (see below).

CODE No.	TYPE	ASSIGNED PARTITIONS
Code1	MAIN USER	1 - 3 - 4
Code2	MAIN USER	2 - 3
Code3	USER	1 - 3
Code4	USER	4
Code5	USER	3 - 4
Code6	PATROL	2
Code7	DURESS	3
Code8	USER	2 - 3

In the example above **Code 1** can program and change the PINs of: Code 1, Code 3, Code 4, Code 5 and Code 7.

Code 2 can program and change the PINs of: Code 2, Code 6, Code 7 and Code 8.

■ **Access to programming**

The Control panel must be disarmed.

Installer   Enter the INSTALLER PIN then press ⌤ENTER.

Main User   Enter a MAIN USER PIN, press ⌤ENTER then press ⌞ON⌟.

+ Access to programming will be signalled by slow flashing on LED 7 and a long high-tone beep.

■ Programming structure and modes

Structure   The programming phase has two distinct phases ----signalled by LED L6.

PHASE 1 ----ENTER PARAMETER ADDRESS ----LED L6 **OFF**

➢ Phase 1 ----enter the Address of the parameter to be programmed (maximum 3 digits) then press ENTER.

Access to **PHASE 2** will be signalled by a long high-tone beep. Access Denied will be signalled by a long low-tone beep. Retry after the error beep.

╋   Press ESC to quit the programming phase.

PHASE 2 ----ENTER PARAMETER VALUE ----LED L6 **ON**

➢ Phase 2 ----enter the value of the parameter then press ENTER.

Parameters such as: partition assignment, options, attributes, enable, disable, etc., can be viewed by means of the LEDs under the number keys. An audible acceptance or error signal will be emitted when the keys are pressed.

Telephone numbers, PINs, times, etc., cannot be viewed on the keypad, and the LEDs under the number keys will be **OFF**.

The entered parameter must match the accepted value e.g. **Time** = hhmm (2 digits for the Hour - 2 digits for the Minutes).

Press ESC to step back to PHASE 1.

╋   **PRESS THE ENTER KEY TO SAVE THE ENTERED PARAMETER VALUE.**
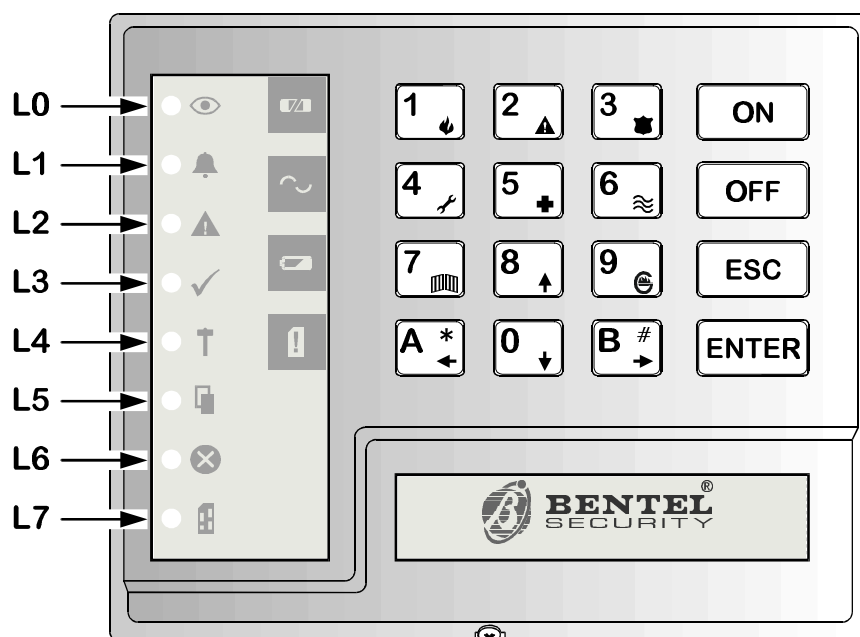
Figure 43   *LEDs and keys*

■ Programming Modes

There are three parameter programming modes: **Single mode**, **Consecutive mode**, **Multi-field mode**. *Refer to examples A, B, C, and D.*

Use the parameter Address tables when programming parameters. The tables show: a brief description; the keys and/ or accepted values of each parameter. The programming mode is also shown (**refer to example D**).

Single mode The ◆ symbol shows the parameter can be programmed in **Single mode** only.

1. Enter the parameter Address then press ENTER.

2. Program the value of the parameter then press ENTER.
   Refer to example A.

Consecutive Mode The ➘ symbol shows the parameter can be programmed in **Single mode and Consecutive mode**.

Parameters programmed in consecutive mode (i.e. all the corresponding parameters of a zone, output or a telephone number) require entry of the Address of the first parameter **only**, as follows.

1. Enter the parameter Address then press ENTER.

2. Program the parameter value then press ENTER.

3. Program the value of the next parameter then press ENTER, and so forth.
   Refer to example B.

Multi-field Mode The ∨ symbol shows the parameter can be programmed in **Multi-field mode**.

Multi-field mode parameters have more than one field (e.g. Clock parameter). Therefore, it is necessary to press ENTER after programming each field.

1. Enter the parameter Address then press ENTER.

2. Program the value of the first field then press ENTER.

3. Program the value of the second field then press ENTER.

   Refer to example C.

Example A

1. Enter the Installer PIN.

2. Press ENTER.

    LED L7 will flash slowly to signal access to programming ----PHASE 1

3. Enter a valid Address e.g. Address 1 for Keypads in configuration.

4. Press ENTER.

    PHASE 2 ----LED L6 **ON**.

5. Setup the keypads in configuration (accepted keys 1 through 8).

6. Press ENTER to save and step back to PHASE 1.

7. Repeat the procedure from step **3** for other parameters.

    PHASE 1 active ----press ESC to quit programming.

    PHASE 2 active ----press ESC to step back to step **3** then press ESC again to quit programming.

+   **PRESS THE ENTER KEY TO SAVE THE ENTERED PARAMETER VALUE.**

Example B

1. Enter the Installer PIN.

2. Press ENTER.

    LED L7 will flash slowly to signal access to programming ----PHASE 1.

3. Enter a valid Address e.g. Address 60 for **Partition assignment** Zone 1.

4. Press ENTER ----PHASE 2 ----LED L6 **ON**.

5. Assign the partitions for zone 1 (accepted keys 1 through 4).

6. Press ENTER to save parameter 60, and step to parameter 61 for **Type** Zone 1 (PHASE 2.)

7. Program the Type for zone 1 (accepted keys 1 through 6).

8. Press ENTER to save parameter 61 and step to parameter 62 for **Balance** type Zone 1 (PHASE 2).

9. Program the Balance type for zone 1 (accepted keys 1 through 4).

10. Press ENTER to save parameter 62 and step to parameter 63 for **Attributes** Zone 1 (PHASE 2).

11. Program the Attributes for zone 1 (accepted keys 1 through 5).

12. Press ENTER to save parameter 63 and step to parameter 64 for **Alarm cycles** Zone 1 (PHASE 2).

13. Program the number of Alarm cycles for zone 1 (accepted values 0 through 15).

14. Press ENTER to save parameter 64 and step back to PHASE 1 step 3.

If ESC is pressed **at step 3** ---programming will be quitted. If ESC is pressed **after step 3** ---the current parameter will not be saved and the control panel will step back to **PHASE 1** step **3.**

✛ PRESS THE ENTER KEY TO SAVE THE ENTERED PARAMETER VALUE.

Example C

1. Enter the Installer PIN.

LED L7 will flash slowly to signal access to programming ---PHASE 1.

2. Press ENTER.

3. Enter a valid Address (e.g. event 325 "SUPERKEY 1" ---refer to "User Manual").

4. Press ENTER ---PHASE 2 ---LED L6 **ON**: this is a multi-field parameter with three fields: **Calls - Event Code - Voice Message**. The first field is for the telephone numbers that will be called when the event occurs.

5. Program the telephone numbers (accepted keys 1 through 8).

6. Press ENTER to save the data in the "Calls" field and step to the "Event Code" field (PHASE 2).

7. Enter the 2 digit event code for the "SUPERKEY 1" event (accepted keys 0 through 9).

8. Press ENTER to save the data in the "Event Code" field and step to the "Voice Message" field (accepted keys 1 through 8 ---PHASE 2).

9. Select the voice message for the "SUPERKEY 1" event (accepted keys 1 through 8 or **key 9 for no message** ---refer to User Manual).

10. Press ENTER to save the data in the "Voice Message" field and step back to PHASE 1 step **3.**

If ⌈ESC⌉ is pressed **at step 3** ----programming will be quitted. If ⌈ESC⌉ is pressed **after step 3** ----the current parameter will not be saved and the control panel will step back to **PHASE 1** step **3**.

+ PRESS THE ENTER KEY TO SAVE THE ENTERED PARAMETER VALUE.

Example D For parameter 1 (keypads in configuration): the accepted keys (1 through 8), and a brief description can be found at the top of the KEYPAD table. The symbol ∪ at the end of the row indicates that the parameter can be programmed in the **Single mode** only.

For parameter 131 (Call Type for telephone number 2): the accepted keys (0 through 9), and a brief description can be found at the top of the TELE-PHONE table. The symbol ↘ at the end of the row in the programming tables indicates that the parameter can be programmed in both **Single mode** and **Consecutive mode**.

For parameter 290 (Clock): data entry instructions can be found at the top of the CLOCK table. The symbol ∨ between the "day - month - year" and also "hour and minutes" fields, indicates that the parameter has two fields.

Security System Control panels **Omnia8/Omnia4**

Keypads parameters (Addresses 1 through 9)

KEYS	KEYPADS IN CONFIGURATION ON= In configuration OFF=Not in configuration	PARTITION ASSIGNED TO KEYPADS
1 ↓	Keypad 1	Partition1
2 ▲	Keypad 2	Partition 2
3 ☕	Keypad 3	Partition 3
4 ✐	Keypad 4	Partition 4
5 ✚	Keypad 5	-
6 ≈	Keypad 6	-
7 ▥	Keypad 7	-
8 ↑	Keypad 8	-

Add.	Keypads parameters	Data
1	Keypads (1 through 8) in configuration u	
2	Assigns partitions for keypad 1 u	
3	Assigns partitions for keypad 2 u	
4	Assigns partitions for keypad 3 u	
5	Assigns partitions for keypad 4 u	
6	Assigns partitions for keypad 5 u	
7	Assigns partitions for keypad 6 u	
8	Assigns partitions for keypad 7 u	
9	Assigns partitions for keypad 8 u	

■ **Key readers 1 through 8 parameters (Addresses 10 through 34)**

KEYS	KEY READERS IN CONFIGURATION ON= In configuration OFF=Not in configuration	ASSIGNED PARTITIONS ON=Assigned OFF=Not Assigned	ARMING MODE A Green LED ON=Arm OFF=Disarm	ARMING MODE B Amber LED ON=Arm OFF=Disarm
1	Key reader 1	Partition 1	Partition 1	Partition 1
2	Key reader 2	Partition 2	Partition 2	Partition 2
3	Key reader 3	Partition 3	Partition 3	Partition 3
4	Key reader 4	Partition 4	Partition 4	Partition4
5	Key reader 5	-	-	-
6	Key reader 6	-	-	-
7	Key reader 7	-	-	-
8	Key reader 8	-	-	-

Add.	Key Readers 1 through 8 in configuration	Data
10	key readers (1 through 8) in configuration U	

Add.	Key Reader 1 parameters	Data
11	Assigns partitions ❯	
12	Amber LED - Arming mode A ❯	
13	Green LED - Arming mode B U	

Add.	Key Reader 2 parameters	Data
14	Assigns partitions ❯	
15	Amber LED - Arming mode A ❯	
16	Green LED - Arming mode B U	

Add.	Key Reader 3 parameters	Data
17	Assigns partitions ❯	
18	Amber LED - Arming mode A ❯	
19	Green LED - Arming mode B U	

Add.	Key Reader 4 parameters	Data
20	Assigns partitions ❯	
21	Amber LED - Arming mode A ❯	
22	Green LED - Arming mode B U	

Add.	Key Reader 5 parameters	Data
23	Assigns partitions ↘	
24	Amber LED - Arming mode A ↘	
25	Green LED - Arming mode B ∪	

Add.	Key Reader 6 parameters	Data
26	Assigns partitions ↘	
27	Amber LED - Arming mode A ↘	
28	Green LED - Arming mode B ∪	

Add.	Key Reader 7 parameters	Data
29	Assigns partitions ↘	
30	Amber LED - Arming mode A ↘	
31	Green LED - Arming mode B ∪	

Add.	Key Reader 8 parameters	Data
32	Assigns partitions ↘	
33	Amber LED - Arming mode A ↘	
34	Green LED - Arming mode B ∪	

■ **Key readers 9 through 16 parameters (Addresses 35 through 59)**

To program parameter 35 refer to the table in the previous paragraph, where keys ①through ⑧ correspond to key readers 9 through 16.

Add.	Key Readers 9 through 16 in configuration	Data
35	key readers (9 through 16)in configuration ∪	

Add.	Key Reader 9 parameters	Data
36	Assigns partitions ↘	
37	Amber LED - Arming mode A ↘	
38	Green LED - Arming mode B ∪	

Add.	Key Reader 10 parameters	Data
39	Assigns partitions ↘	
40	Amber LED - Arming mode A ↘	
41	Green LED - Arming mode B ∪	

Add.	Key Reader 11 parameters	Data
42	Assigns partitions ↘	
43	Amber LED - Arming mode A ↘	
44	Green LED - Arming mode B ∪	

Add.	Key Reader 12 parameters	Data
45	Assigns partitions ⬊	
46	Amber LED - Arming mode A ⬊	
47	Green LED - Arming mode B ∪	

Add.	Key Reader 13 parameters	Data
48	Assigns partitions ⬊	
49	Amber LED - Arming mode A ⬊	
50	Green LED - Arming mode B ∪	

Add.	Key Reader 14 parameters	Data
51	Assigns partitions ⬊	
52	Amber LED - Arming mode A ⬊	
53	Green LED - Arming mode B ∪	

Add.	Key Reader 15 parameters	Data
54	Assigns partitions ⬊	
55	Amber LED - Arming mode A ⬊	
56	Green LED - Arming mode B ∪	

Add.	Key Reader 16 parameters	Data
57	Assigns partitions ⬊	
58	Amber LED - Arming mode A ⬊	
59	Green LED - Arming mode B ∪	

■ **Zone programming**

KEYS	PARTITIONS	TYPE	BALANCE TYPE	ATTRIBUTES
1	Partition 1	Instant	Normally closed	Double pulse
2	Partition 2	Delayed	Normally open	Unbypassable
3	Partition 3	Path	Balanced	Chime
4	Partition 4	24h	Double balanced	Test
5	-	Duress		Silence
6	-	Fire		
7		Arm Partitions		
8		Switch status		

Alarm cycles   Enter the required number of cycles: 0 through 14. Enter 15 for Repetitive cycles.

Add.	Zone 1 parameters	Data
60	Assigns partitions ⬂	
61	type ⬂	
62	balance type ⬂	
63	attributes ⬂	
64	alarm cycles ⊔	

Add.	Zone 2 parameters	Data
65	Assigns partitions ⬂	
66	type ⬂	
67	balance type ⬂	
68	attributes ⬂	
69	alarm cycles ⊔	

Add.	Zone 3 parameters	Data
70	Assigns partitions⬂	
71	type ⬂	
72	balance type ⬂	
73	attributes ⬂	
74	alarm cycles ⊔	

Add.	Zone 4 parameters	Data
75	Assigns partitions ⬂	
76	type ⬂	
77	balance type ⬂	
78	attributes ⬂	
79	alarm cycles ⊔	

Add.	Zone 5 parameters	Data
80	Assigns partitions ⬂	
81	type ⬂	
82	balance type ⬂	
83	attributes ⬂	
84	alarm cycles ⊔	

Add.	Zone 6 parameters	Data
85	Assigns partitions ⬂	
86	type ⬂	
87	balance type ⬂	
88	attributes ⬂	
89	alarm cycles ⊔	

Add.	Zone 7 parameters	Data
90	Assigns partitions ⬂	
91	type ⬂	
92	balance type ⬂	
93	attributes ⬂	
94	alarm cycles ⊔	

Add.	Zone 8 parameters	Data
95	Assigns partitions ↘	
96	type ↘	
97	balance type ↘	
98	attributes ↘	
99	alarm cycles ↶	

■ **Outputs parameters (Addresses 100 through 105)**

KEYS	PARTITIONS	ATTRIBUTES	SIGNALS
1	Partition 1	LED ON = Normally Open LED OFF = Normally Closed	Arming delay
2	Partition 2	-	Chime
3	Partition 3	-	Entry Time
4	Partition 4	-	Exit Time
5	-	-	Alarm memory
6	-	-	Trouble
7	-	-	Partitions Disarmed
8	-	-	Partitions Armed
9	-	-	Alarm and Tamper
0	-	-	Fire GND
A *	-	-	Telephone line Trouble

Add.	Output 1 parameters	Data
100	Assigns partitions ↘	
101	attributes ↘	
102	signals ↶	

Add.	Output 2 parameters	Data
103	Assigns partitions ↘	
104	attributes ↘	
105	signals ↶	

■ Times

ENTRY and **EXIT** times are in seconds (maximum 255 seconds). **Alarm delay**, **PATROL** and **ALARM** times are in minutes (maximum 99 minutes).

Add.	Partition 1 times	Data
112	Exit Time in seconds∪	
113	Entry Time in seconds ∪	
114	Arming Delay in minutes ∪	

Add.	Partition 2 times	Data
115	Exit Time in seconds∪	
116	Entry Time in seconds ∪	
117	Arming Delay in minutes ∪	

Add.	Partition 3 times	Data
118	Exit Time in seconds∪	
119	Entry Time in seconds ∪	
120	Arming delay in minutes ∪	

Add.	Partition 4 times	Data
121	Exit Time in seconds∪	
122	Entry Time in seconds ∪	
123	Arming Delay in minutes ∪	

Add.	Patrol time	Data
124	Patrol Time in minutes ∪	

Add.	Alarm time	Data
125	Alarm Time in minutes ∪	

■ Telephone Numbers (Addresses 126 through 157)

When programming a Telephone Number ----use key $\boxed{A\ *}$ to insert pauses of 2 seconds, and key $\boxed{B\ \#}$ key to cancel errors.

KEYS	CALL TYPE	EXTENDED	CHECK-SUM
$\boxed{1}$	Ademco Slow 10bps	ON = Extended OFF = Not Extended	-
$\boxed{2}$	Ademco Fast 14 bps	-	ON = Check-Sum OFF = No Check-Sum
$\boxed{3}$	Franklin 20bps	-	-
$\boxed{4}$	Radionics 40bps	-	-
$\boxed{5}$	Scantronics 10bps	-	-
$\boxed{6}$	Customized	-	-
$\boxed{7}$	ContactID	-	-

KEYS	CALL TYPE	EXTENDED	CHECK-SUM
8	*Reserved*	-	-
9	Teleservice	-	-
0	Voice message	-	-

Customer Code: Keys 1 through 9 and superkeys 1 through 6 for hexadecimal digits A, B, C, D, E and F. For Pulse protocols the 0 key corresponds to A.

Add.	Telephone number 1	Data
126	telephone number (16 digits max.) ❯	
127	call type ❯	
128	checksum Y / N - extended Y / N❯	
129	customer code 4 digits ∪	

Add.	Telephone number 2	Data
130	telephone number (16 digits max.) ❯	
131	call type ❯	
132	checksum Y / N - extended Y / N❯	
133	customer code 4 digits ∪	

Add.	Telephone number 3	Data
134	telephone number (16 digits max.) ❯	
135	call type ❯	
136	checksum Y / N - extended Y / N❯	
137	customer code 4 digits ∪	

Add.	Telephone number 4	Data
138	telephone number (16 digits max.) ❯	
139	call type ❯	
140	checksum Y / N - extended Y / N❯	
141	customer code 4 digits ∪	

Add.	Telephone number 5	Data
142	telephone number (16 digits max.)❯	
143	call type ❯	
144	checksum Y / N - extended Y / N❯	
145	customer code 4 digits ∪	

Add.	Telephone number 6	Data
146	telephone number (16 digits max.) ↘	
147	call type ↘	
148	checksum Y / N - extended Y / N↘	
149	customer code 4 digits ∪	

Add.	Telephone number 7	Data
150	telephone number (16 digits max.) ↘	
151	call type ↘	
152	checksum Y / N - extended Y / N↘	
153	customer code 4 digits ∪	

Add.	Telephone number 8	Data
154	telephone number (16 digits max.) ↘	
155	call type ↘	
156	checksum Y / N - extended Y / N↘	
157	customer code 4 digits ∪	

■ **Customer Telephone Options (Address 158)**

Tone check: use key $\boxed{1}$ to enable / disable this option.

Key $\boxed{1}$ OFF = Tone check **enabled**

Key $\boxed{1}$ ON = Tone check **disabled**

Dialling Type: use key $\boxed{2}$ to select the dialling type.

Key $\boxed{2}$ ON = DTMF dialling

Key $\boxed{2}$ OFF = Pulse dialling

Test Event: use key $\boxed{3}$ to enable / disable this option.

Key $\boxed{3}$ ON = Test Event **enabled**

Key $\boxed{3}$ OFF = Test Event **disabled**

Add.	Description	Data
158	Tone check, Dialling type, Test Event ∪	

■ **Teleservice (Addresses 159 through 164)**

Number of rings before the control panel answers: max. 2 digits.

Double call: use key $\boxed{1}$ to enable / disable this option.

Key $\boxed{1}$ ON = Double call **enabled**

Key $\boxed{1}$ OFF = Double call **disabled**

Teleservice telephone number and Callback

Teleservice telephone number: press the number key that corresponds to the telephone number that will be used for **Teleservice**. Accepted keys $\boxed{1}$ through $\boxed{8}$.

Callback: use key $\boxed{9}$ to enable / disable this option.

Key $\boxed{9}$ ON = Callback **enabled**

Key $\boxed{9}$ OFF = Callback **disabled**

Test event

Period: program the number of days between each test event (dd = days)
Hour: program the test event time (hh:mm = hours:minutes).
Delay: program the number of days that must elapse (from quitting programming) before the first test event (dd = days).

Add.	Description	Data
159	number of rings before answer ↘	
160	Double call YES / NO ↘	
161	Teleservice telephone call (1-8) Callback (9) ↘	
162	period in dd ↘	
163	time of day hh:mm ↘	
164	delay in dd ∪ (number of days before first test)	

■ **Codes (Addresses 165 through 256)**

Each Code has the following: a **PIN** (4 to 6 digits), a **Type**, its assigned **Partitions**, **Type A Arming Mode** and **Type B Arming Mode**.

KEYS	CODE TYPE	PARTITIONS (ON=Assigned OFF=Not Assigned)	TYPE A ARMING MODE (ON=Arm OFF=Disarm)	TYPE B ARMING MODE (ON=Arm OFF=Disarm)
$\boxed{1}$	Disabled	Partition 1	Partition 1	Partition 1
$\boxed{2}$	Main User	Partition 2	Partition 2	Partition 2
$\boxed{3}$	User	Partition 3	Partition 3	Partition 3
$\boxed{4}$	Duress	Partition 4	Partition 4	Partition4
$\boxed{5}$	Patrol	-		-

+ Installer PIN no. 24 can be changed by the **Installer only** (refer to parameter 257).

The Options and Partitions can be programmed by the **Installer only**.

PINs 1 through 23 can be changed by the **Main User only**.

Add.	Code 1	Data
165	Code type ↘	
166	Assigns partitions ↘	
167	Arming mode A ↘	
168	Arming mode B ↖	

Add.	Code 2	Data
169	Code type ↘	
170	Assigns partitions ↘	
171	Arming mode A ↘	
172	Arming mode B ↖	

Add.	Code 3	Data
173	Code type ↘	
174	Assigns partitions ↘	
175	Arming mode A ↘	
176	Arming mode B ↖	

Add.	Code 4	Data
177	Code type ↘	
178	Assigns partitions ↘	
179	Arming mode A ↘	
180	Arming mode B ↖	

Add.	Code 5	Data
181	Code type ↘	
182	Assigns partitions ↘	
183	Arming mode A ↘	
184	Arming mode B ↖	

Add.	Code 6	Data
185	Code type ↘	
186	Assigns partitions ↘	
187	Arming mode A ↘	
188	Arming mode B ↖	

Add.	Code 7	Data
189	Code type ↘	
190	Assigns partitions ↘	
191	Arming mode A ↘	
192	Arming mode B ↖	

Add.	Code 8	Data
193	Code type ↘	
194	Assigns partitions ↘	
195	Arming mode A ↘	
196	Arming mode B ↖	

Add.	Code 9	Data
197	Code type ↘	
198	Assigns partitions ↘	
199	Arming mode A ↘	
200	Arming mode B ↖	

Add.	Code 10	Data
201	Code type ⬂	
202	Assigns partitions ⬂	
203	Arming mode A ⬂	
204	Arming mode B ⊔	

Add.	Code 11	Data
205	Code type ⬂	
206	Assigns partitions ⬂	
207	Arming mode A ⬂	
208	Arming mode B ⊔	

Add.	Code 12	Data
209	Code type ⬂	
210	Assigns partitions ⬂	
211	Arming mode A ⬂	
212	Arming mode B ⊔	

Add.	Code 13	Data
213	Code type ⬂	
214	Assigns partitions ⬂	
215	Arming mode A ⬂	
216	Arming mode B ⊔	

Add.	Code 14	Data
217	Code type ⬂	
218	Assigns partitions ⬂	
219	Arming mode A ⬂	
220	Arming mode B ⊔	

Add.	Code 15	Data
221	Code type ⬂	
222	Assigns partitions ⬂	
223	Arming mode A ⬂	
224	Arming mode B ⊔	

Add.	Code 16	Data
225	Code type ⬂	
226	Assigns partitions ⬂	
227	Arming mode A ⬂	
228	Arming mode B ⊔	

Add.	Code 17	Data
229	Code type ⬂	
230	Assigns partitions ⬂	
231	Arming mode A ⬂	
232	Arming mode B ⊔	

Add.	Code 18	Data
233	Code type ↘	
234	Assigns partitions ↘	
235	Arming mode A ↘	
236	Arming mode B ↵	

Add.	Code 19	Data
237	Code type ↘	
238	Assigns partitions ↘	
239	Arming mode A ↘	
240	Arming mode B ↵	

Add.	Code 20	Data
241	Code type ↘	
242	Assigns partitions ↘	
243	Arming mode A ↘	
244	Arming mode B ↵	

Add.	Code 21	Data
245	Code type ↘	
246	Assigns partitions ↘	
247	Arming mode A ↘	
248	Arming mode B ↵	

Add.	Code 22	Data
249	Code type ↘	
250	Assigns partitions ↘	
251	Arming mode A ↘	
252	Arming mode B ↵	

Add.	Code 23	Data
253	Code type ↘	
254	Assigns partitions ↘	
255	Arming mode A ↘	
256	Arming mode B ↵	

■ Installer PIN (Address 257)

Installer PIN: 4 to 6 digits

✚ The Installer PIN can be changed by the Installer only.

Add.	Description
257	new Installer PIN ν confirm new Installer PIN ↵

■ Timer on Partitions (Addresses 258 through 289)

Weekly: the control panel will arm at the programmed time every day.

Daily: the control panel will arm at the time programmed for each specific day.

Time format = hh:mm

✚ Press [9][9][9][9] to delete the programmed time.

Add.	Timer Partition 1	Data
258	arm at time *Weekly*⊔	
259	arm at time *Monday* ⬊	
260	arm at time *Tuesday* ⬊	
261	arm at time *Wednesday* ⬊	
262	arm at time *Thursday* ⬊	
263	arm at time *Friday* ⬊	
264	arm at time *Saturday* ⬊	
265	arm at time *Sunday* ⊔	

Add.	Timer Partition 2	Data
266	arm at time *Weekly* ⊔	
267	arm at time *Monday* ⬊	
268	arm at time *Tuesday*⬊	
269	arm at time *Wednesday* ⬊	
270	arm at time *Thursday* ⬊	
271	arm at time *Friday*⬊	
272	arm at time *Saturday* ⬊	
273	arm at time *Sunday*⊔	

Add.	Timer Partition 3	Data
274	arm at time *Weekly* ⊔	
275	arm at time *Monday* ⬊	
276	arm at time *Tuesday* ⬊	
277	arm at time *Wednesday* ⬊	
278	arm at time *Thursday* ⬊	
279	arm at time *Friday* ⬊	
280	arm at time *Saturday* ⬊	
281	arm at time *Sunday*⊔	

Add.	Timer Partition 4	Data
282	arm at time *Weekly* ⊔	
283	arm at time *Monday* ⬊	
284	arm at time *Tuesday* ⬊	
285	arm at time *Wednesday* ⬊	
286	arm at time *Thursday* ⬊	
287	arm at time *Friday* ⬊	
288	arm at time *Saturday* ⬊	
289	arm at time *Sunday* ⊔	

■ **Clock (Address 290)**

Day: 2 digits. Month: 2 digits. Year: 4 digits.

Hour and minutes format = hh:mm

✚ Dates before 1st January 1999 will not be accepted.

If ENTER is pressed, without data entry, the control panel will step back to the PHASE 1.

Add.	Description
290	day, month, year ⋁ hour and minutes ⊔

Example **To program** 25 April 2001 - hh.mm = 12:45
from the Programming phase:

1. Select $\boxed{2_\blacktriangle}\boxed{5_+}\boxed{0_\downarrow}\boxed{4_\nearrow}\boxed{2_\blacktriangle}\boxed{0_\downarrow}\boxed{0_\downarrow}\boxed{1_\downarrow}$ then press $\boxed{\text{ENTER}}$.

2. Select $\boxed{1_\downarrow}\boxed{2_\blacktriangle}\boxed{4_\nearrow}\boxed{5_+}$ then press $\boxed{\text{ENTER}}$.

■ <u>**Events (Addresses 291 through 418)**</u>

KEYS	TELEPHONE NUMBERS TO BE DIALLED	VOICE MESSAGE TO BE SENT
$\boxed{1_\downarrow}$	Telephone number 1	Voice message 1
$\boxed{2_\blacktriangle}$	Telephone number 2	Voice message 2
$\boxed{3_\blacksquare}$	Telephone number 3	Voice message 3
$\boxed{4_\nearrow}$	Telephone number 4	Voice message 4
$\boxed{5_+}$	Telephone number 5	Voice message 5
$\boxed{6_\approx}$	Telephone number 6	Voice message 6
$\boxed{7_{\text{▥}}}$	Telephone number 7	Voice message 7
$\boxed{8_\downarrow}$	Telephone number 8	Voice message 8
$\boxed{9_©}$	-	No Voice message

Assign the telephone numbers, the event code, the voice messages to each of the 128 events (refer to the table on the following page).

Telephone numbers Use keys $\boxed{1_\downarrow}$ and $\boxed{8_\downarrow}$ to select the telephone numbers to dial for the event in question.
Key **ON** = Telephone number will be dialled
Key **OFF** = Telephone number will not be dialled

Event code Assign a 2 digits code to each event. Use keys $\boxed{1_\downarrow}$ through $\boxed{9_©}$ and super keys $\boxed{1_\downarrow}$ through $\boxed{6_\approx}$ for hexadecimal digits A, B, C, D, E and F.

+ The event with code 00 will not generate calls to the Central station.

Voice message Use keys $\boxed{1_\downarrow}$ through $\boxed{8_\downarrow}$ to select the Voice message for the event in question.

Key **ON** = Voice message will be sent
Key **OFF** = Voice message will not be sent

Use key $\boxed{9_©}$ to clear the voice message that corresponds to the event in question.

+ The event with no Voice message will not generate voice calls.

Add.	Description
xxx	Telephone numbers ∨ Event code ∨ Voice message ∪
...	...

The following table shows the **list of Events** that can activate the digital and voice communicators.

➢ The **Add.** column shows the address of each event.

➢ The **no.** column shows the identifier number of each event (corresponding to the identifier no. in the Events page in the software suite).

➢ The **TELEPHONE NUMBER** columns are for the telephone numbers that will be dialled when the event occurs.

➢ The **EC** column is for the Code assigned to the event.

➢ The **VOICE MESSAGE** columns are for the Voice message that will be sent when the event occurs.

➢ The **T** column shows the non-modifiable part of the Contact ID protocol code (assigned to the event type by the control panel).

➢ The **A** column shows the Contact ID protocol code assigned to the event when the Automatic Code Programming option is selected (refer to "Events" Add 426).

			TELEPHONE NUMBER									VOICE MESSAGES									
Use this row for the Telephone Numbers and Voice Messages																					
Add.	**no.**	**DESCRIPTION**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**EC**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**A**	**T**
291	01	Alarm partition 1																		1	00
292	02	Alarm partition 2																		1	00
293	03	Alarm partition 3																		1	00
294	04	Alarm partition 4																		1	00
295	05	Alarm zone 1																		1	3A
296	06	Alarm zone 2																		1	3A
297	07	Alarm zone 3																		1	3A
298	08	Alarm zone 4																		1	3A
299	09	Alarm zone 5																		1	3A
300	10	Alarm zone 6																		1	3A
301	11	Alarm zone 7																		1	3A
302	12	Alarm zone 8																		1	3A
303	13	Tamper																		1	45
304	14	Mains failure Trouble																		3	A1
305	15	Battery Trouble																		3	A2
306	16	Fuse Trouble																		3	00
307	17	BPI Trouble																		3	3A
308	18	Reset Alarm zone 1																		1	3A
309	19	Reset Alarm zone 2																		1	3A
310	20	Reset Alarm zone 3																		1	3A
311	21	Reset Alarm zone 4																		1	3A

Add.	no.	DESCRIPTION	TELEPHONE NUMBER									VOICE MESSAGES									A	T
		Use this row for the Telephone Numbers and Voice Messages																				
			1	2	3	4	5	6	7	8	EC	1	2	3	4	5	6	7	8	A	T
312	22	Reset Alarm zone 5																		1	3A
313	23	Reset Alarm zone 6																		1	3A
314	24	Reset Alarm zone 7																		1	3A
315	25	Reset Alarm zone 8																		1	3A
316	26	Reset tamper																		1	45
317	27	Reset mains failure Trouble																		3	A1
318	28	Reset battery Trouble																		3	A2
319	29	Reset fuse Trouble																		3	00
320	30	Reset BPI Trouble																		3	3A
321	31	Super key 1																		1	15
322	32	Super key 2																		1	AA
323	33	Super key 3																		1	2A
324	34	Arm partition 1																		4	02
325	35	Arm partition 2																		4	02
326	36	Arm partition 3																		4	02
327	37	Arm partition 4																		4	02
328	38	Disarm partition 1																		4	02
329	39	Disarm partition 2																		4	02
330	40	Disarm partition 3																		4	02
331	41	Disarm partition 4																		4	02
332	42	Arm Special partition 1																		4	02
333	43	Arm Special partition 2																		4	02
334	44	Arm Special partition 3																		4	02
335	45	Arm Special partition 4																		4	02
336	46	Disarm Special partition 1																		4	02
337	47	Disarm Special partition 2																		4	02
338	48	Disarm Special partition 3																		4	02
339	49	Disarm Special partition 4																		4	02
340	50	Arm / DisA. by Code 1																		4	22
341	51	Arm / DisA. by Code 2																		4	22
342	52	Arm / DisA. by Code 3																		4	22
343	53	Arm / DisA. by Code 4																		4	22
344	54	Arm / DisA. by Code 5																		4	22
345	55	Arm / DisA. by Code 6																		4	22
346	56	Arm / DisA. by Code 7																		4	22
347	57	Arm / DisA. by Code 8																		4	22
348	58	Arm / DisA. by Code 9																		4	22
349	59	Arm / DisA. by Code 10																		4	22
350	60	Arm / DisA. by Code 11																		4	22
351	61	Arm / DisA. by Code 12																		4	22
352	62	Arm / DisA. by Code 13																		4	22
353	63	Arm / DisA. by Code 14																		4	22
354	64	Arm / DisA. by Code 15																		4	22
355	65	Arm / DisA. by Code 16																		4	22

			TELEPHONE NUMBER									VOICE MESSAGES									
Use this row for the Telephone Numbers and Voice Messages																					
Add.	no.	DESCRIPTION	1	2	3	4	5	6	7	8	EC	1	2	3	4	5	6	7	8	A	T
356	66	Arm / DisA. by Digital key 1																		4	22
357	67	Arm / DisA. by Digital key 2																		4	22
358	68	Arm / DisA. by Digital key 3																		4	22
359	69	Arm / DisA. by Digital key 4																		4	22
360	70	Arm / DisA. by Digital key 5																		4	22
361	71	Arm / DisA. by Digital key 6																		4	22
362	72	Arm / DisA. by Digital key 7																		4	22
363	73	Arm / DisA. by Digital key 8																		4	22
364	74	Arm / DisA. by Digital key 9																		4	22
365	75	Arm / DisA. by Digital key 10																		4	22
366	76	Arm / DisA. by Digital key 11																		4	22
367	77	Arm / DisA. by Digital key 12																		4	22
368	78	Arm / DisA. by Digital key 13																		4	22
369	79	Arm / DisA. by Digital key 14																		4	22
370	80	Arm / DisA. by Digital key 15																		4	22
371	81	Arm / DisA. by Digital key 16																		4	22
372	82	Command via modem																		4	22
373	83	Reset Memory partition 1																		6	00
374	84	Reset Memory partition 2																		6	00
375	85	Reset Memory partition 3																		6	00
376	86	Reset Memory partition 4																		6	00
377	87	Bypass zone 1																		5	7A
378	88	Bypass zone 2																		5	7A
379	89	Bypass zone 3																		5	7A
380	90	Bypass zone 4																		5	7A
381	91	Bypass zone 5																		5	7A
382	92	Bypass zone 6																		5	7A
383	93	Bypass zone 7																		5	7A
384	94	Bypass zone 8																		5	7A
385	95	Unbypass zone 1																		5	7A
386	96	Unbypass zone 2																		5	7A
387	97	Unbypass zone 3																		5	7A
388	98	Unbypass zone 4																		5	7A
389	99	Unbypass zone 5																		5	7A
390	100	Unbypass zone 6																		5	7A
391	101	Unbypass zone 7																		5	7A
392	102	Unbypass zone 8																		5	7A
393	103	Test																		6	A2
394	104	Telephone line Trouble																		3	54
395	105	Reset telephone line																		3	54
396	106	Disarm by duress partition 1																		1	21
397	107	Disarm by duress partition 2																		1	21
398	108	Disarm by duress partition 3																		1	21
399	109	Disarm by duress partition 4																		1	21

			TELEPHONE NUMBER									VOICE MESSAGES									
Add.	**no.**	**DESCRIPTION**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**EC**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**A**	**T**
400	110	Event buffer 70 % full																		1	00
401	–	Reserved - Do not program!	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
402	–	Reserved - Do not program!	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
403	–	Reserved - Do not program!	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
404	–	Reserved - Do not program!	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
405	–	Reserved - Do not program!	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
406	–	Reserved - Do not program!	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
407	–	Reserved - Do not program!	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
408	–	Reserved - Do not program!	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
409	–	Reserved - Do not program!	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
410	–	Reserved - Do not program!	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
411	–	Reserved - Do not program!	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
412	–	Reserved - Do not program!	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
413	–	Reserved - Do not program!	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
414	–	Reserved - Do not program!	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
415	–	Reserved - Do not program!	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
416	–	Reserved - Do not program!	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
417	–	Reserved - Do not program!	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
418	–	Reserved - Do not program!	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Use this row for the Telephone Numbers and Voice Messages

■ **Programming digital keys (Addresses 419 through 422)**

New Random code Address 419

1. Enter 419.

2. Press ENTER.

3. Press ENTER to confirm and step back to PHASE 1.

   Operation Done will be confirmed by a long high-tone beep.

4. Press ESC to quit the operation without saving, and step back to the PHASE 1.

Digital key programming Address 420:

1. Enter 420.

2. Press ENTER.

3. Enter a valid key reader number.

4. Press ENTER.

5. Enter any key number (1 through 128).

6. Press ENTER.

+ If no key number is entered, and ENTER is pressed, the digital key number will correspond to the current number stored in the control panel memory.

To program the digital key features:

KEYS	Setting options	Data
1 ↵	digital key valid on partition 1	
2 ▲	digital key valid on partition 2	
3 ✿	digital key valid on partition 3	
4 ↗	digital key valid on partition 4	
5 ✚	valid service digital key (for service mode)	
6 ≈	valid digital key (non-service)	

➢ Insert the digital key into the selected key reader and wait for the beep.
During this phase it will be possible to program all the digital keys, and also change the setting options displayed on the keypad.
All digital keys programmed after 128 will be clones, that is, with identical features as digital key 128.

Press ESC to quit.

To read a new Random code on a digital key Address 421:

1. Enter 421.

2. Press ENTER.

3. Select key reader: 1 through 16.

4. Press ENTER.

5. Insert the digital key to read the random code. A long high-tone beep will confirm **Operation Done**.

Add.	Description
419	generates new Random code ∪
420	select key reader ∨ select key no. ∨ set options and insert key
421	select key reader ∨ insert key to read new random code
422	select key no. ∨ set options ∪ (Prog.)

Electronic keys for MASTER / SLAVE systems

A MASTER / SLAVE system must have 2 or more control panels. MASTER / SLAVE systems are configured as follows: **1)** one MASTER control panel; **2)** one (or more) SLAVE control panel(s). Electronic keys **must be programmed** on the MASTER control panel, and can be used **on all the control panels of a MASTER / SLAVE system**.
To configure a control panel as **MASTER**: carry out **Address 419** procedure.

Only the MASTER control panel can change the identification number (1 through 128) of electronic keys.

To configure a control panel as **SLAVE**: use a valid electronic key and follow **Address 421** procedure. SLAVE control panels can program the options of valid electronic keys only. The factory default programming of the control panel is **MASTER**.

■ Options (Addresses 423 to 425)

Addresses 423 and 425 are for **Options** programming. During Options programming the keys will take on the meaning shown in the following tables: Key **OFF** = option **disabled**; Key **ON** = option **enabled**.

Add.	Keys	OPTIONS	DEFAULT
423	1	Auto-reset partition no. 1	
	2	Auto-reset partition no. 2	
	3	Auto-reset partition no. 3	
	4	Auto-reset partition no. 4	
	5	False Digital Key signalling	
	6	Immediate Mains Failure signalling	
	7	Key reader LEDs permanently active	
	8	Telephone line check	
	ENTER	⊔	

Add.	Keys	OPTIONS	DEFAULT
425	1	Reset tamper memory denied to User Code	
	2	Reset alarm memory denied to Installer Code	
	3	Arming denied with battery trouble	
	4	Enable Installer Code for User Code PIN programming via PC	
	ENTER	◆	

Enable Installer Code PIN for User Code PIN programming via PC

When this option is enabled the Installer can program all the User Code PINs via PC (the Main User PIN will not be required). However, the Installer Code PIN must be entered in the **Installer Code** page. The words **Freed PIN Programming** on the title bar of the **PIN Programming** window will flash to signal option enabled.

+ This option can be enabled from the keypad only.

> **WARNING** Use of **Freed PIN programming** lowers the security level of the system, and is done at the **Installers own risk.** The customer must be informed of the possible consequences.

■ Events (Address 426)

Address 426 is for automatic programming of the Contact ID Event Codes (refer toTable on page 106).

426	1 ↓	Automatic Programming for Contact ID	
	2 ▲	Delete Event Codes and clear all telephone numbers	
	ENTER	◆	